Indraprastha Law Review ISSN: 2583-5653

INDRAPRASTHA LAW REVIEW

E-JOURNAL OF

UNIVERSITY SCHOOL OF LAW AND LEGAL STUDIES

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY

Summer and Winter 2025: Vol. VI ISSUE I & II

Indraprastha Law Review ISSN: 2583-5653

Editor-in- Chief

Prof. (Dr.) Shivani Goswami

Dean & Professor of Law

University School of Law and Legal Studies

Guru Gobind Singh Indraprastha University

Editor(s)

Prof. (Dr.) Gurujit Singh

Professor of Law

University School of Law and Legal Studies

Guru Gobind Singh Indraprastha University

Prof. (Dr.) Neelu Mehra

Professor of Law

University School of Law and Legal Studies

Guru Gobind Singh Indraprastha University

Dr. Zubair A. Khan

Associate Professor of Law

University School of Law and Legal Studies

Guru Gobind Singh Indraprastha University

Indraprastha Law Review ISSN: 2583-5653

Advisory Board

Prof. (Dr.) Manoj Kumar Sinha
Vice Chancellor
Dharmashastra National Law University, Jabalpur

Prof. (Dr.) Amar Pal Singh
Vice Chancellor
Dr. Ram Manohar Lohiya National Law University

Prof. (Dr.) V.K. Ahuja
Director
Indian Law Institute, Delhi

Prof. (Dr.) Anupam Jha
Professor-in-Charge,
Law Centre-II, Faculty of Law – University of Delhi

Prof. (Dr.) Chandra Prakash Singh
Professor
Faculty of Law, University of Lucknow

Prof. (Dr.) Kanwal DP Singh
Former Dean & Professor of Law
University School of Law and Legal Studies
Guru Gobind Singh Indraprastha University

Prof. (Dr.) M. Afzal Wani (Retd.)
Former Dean
University School of Law and Legal Studies
Guru Gobind Singh Indraprastha University

Editorial Team

Mr. Yash Gupta (Ph.D. Scholar)
Mr. Shailabh Luthra (Ph.D. Scholar)
Ms. Hitanshi Goel (Ph.D. Scholar)
Ms. Prachi Mishra (Ph.D. Scholar)
Mr. Devesh Bhardwaj (Ph.D. Scholar)
Ms. Bhawna Sachdeva (Ph.D. Scholar)
Ms. Aditi Mazumdar (Ph.D. Scholar)
Ms. Shagun Lal (Ph.D. Scholar)
Ms. Garima Singh (Ph.D. Scholar)
Ms. Tannu Sharma (Ph.D. Scholar)
Ms. Monshikha Choudhary (Ph.D. Scholar)

Copyright Policy

The contributions accepted for publication and the copyright therein shall remain jointly with the contributor and the ILR. Any person desiring to use the ILRs' material for educational purposes, research or private study can do so with prior written consent of the Editorial Board.

All rights reserved. No part of this e-journal may be reproduced or utilized in any form or by any means, electronic and mechanical, including photocopying recording or by any information storage or otherwise, without permission in writing from GGSIPU, Delhi.

Copyright © GGSIPU

Disclaimer: The Views expressed by the author(s) in this e-journal are their personal views and do not reflect the views of the Guru Gobind Singh Indraprastha University, Delhi. GGSIPU is not responsible for mistakes if any, and for copyright violations of any kind.

INDRAPRASTHA LAW REVIEW

S. No.	Authors	Title of Manuscripts	Page No.	Classification
1.	Dr Manjinder Gulyani & Kritika Chahal	RIGHT TO CONTROLLED COMMERCIALISATION: PERSONALITY RIGHTS VIS-À-VIS PUBLICITY RIGHTS	7-19	Article
2.	Dr. Anjali & Parineet Chadha	MOUNTING TIME POVERTY AND CARE GAP: PRIORITIZING SYNERGY BETWEEN PROTECTION INVESTMENTS AND INCLUSIVE ECONOMIC GROWTH	20-42	Article
3.	Dr. Rohit Tiwari	EVALUATING THE EFFECTIVENESS OF CORPORATE INSOLVENCY LAWS IN INDIA: THE WAY FORWARD FOR VIKSIT BHARAT 2047	43-59	Article
4.	Appoorva Dangi & Anuj Kumar Vaksha	KAMIKAZE DRONES: ETHICAL IMPLICATIONS OF LETHAL AUTONOMOUS WEAPONS SYSTEM	60-73	Article
5.	Anjali Sharma & Dr. Neha Kapur Chawla	BEYOND TECHNOLOGICAL SOLUTIONISM: LEGAL AND ECONOMIC BARRIERS TO BLOCKCHAIN-BASED SHAREHOLDER DEMOCRACY	74-95	Article
6.	Hritwik Ravi & Sudhanshu Tyagi	RETHINKING TESTIMONIAL COMPULSION: ARTICLE 20(3) IN THE ERA OF ENCRYPTION	96-110	Article
7.	Nisheeth Chandrachoor	E-LEARNING: REFORMING THE DIGITAL DIVIDE INTO GOLDEN OPPORTUNITIES IN HIGHER EDUCATION IN INDIA	111-127	Article

INDRAPRASTHA LAW REVIEW

8.	**Manmeet Dhillon**	**PROTECTING CUSTOMARY INTERNATIONAL LAW FROM ISDS SUBORDINATION: INDIA'S MODEL BIT REFORMS**	**128-142**	**Article**
9.	**Mukul Lakra**	**MENTAL HEALTH IN THE DIGITAL AGE: REASSESSING ARTICLE 21 IN THE CONTEXT OF TECHNOLOGICAL STRESS AND ONLINE HARASSMENT**	**143-156**	**Article**
10.	**Nikita Bhati & Vijay Pratap Singh Bhadoriya**	**E-WASTE, INNOVATION AND OWNERSHIP: THE REASON INTELLECTUAL PROPERTY LAWS SHOULD CHANGE TO ADAPT TO THE RIGHT TO REPAIR.**	**157-176**	**Article**
11.	**Deepanshu**	**GLOBALIZATION'S IMPACT ON ADR: COMPARATIVE EVOLUTION IN DEVELOPING AND DEVELOPED NATIONS**	**177-195**	**Article**
12.	**Gopansh Sharma**	**THE BORDER CARBON CONUNDRUM: CBAM AND THE TRADE—CLIMATE INTERFACE IN GLOBAL GOVERNANCE**	**196-213**	**Article**

INDRAPRASTHA LAW REVIEW

RIGHT TO CONTROLLED COMMERCIALISATION: PERSONALITY RIGHTS VIS-À-VIS PUBLICITY RIGHTS

- Dr Manjinder Gulyani*
- Kritika Chahal**

ABSTRACT

The court's involvement with every other celebrity in town, enforcing their publicity/personality rights, has left the public at large questioning what they entail and what exactly they are. The paper attempts to distinguish between personality and publicity rights, highlighting the need for a set of principles governing these rights. Further, it analyses the "controlled commercialisation" aspect, which the courts are seen to take in most of the cases, as not merely publicity rights are being granted, but the dignity aspect is kept well in mind, taking a different path from what has been established in the Haelan Laboratories case[1](the establishing authority).

I. INTRODUCTION

With the unfolding of Generative AI, Deepfakes, Avatars, and virtual reality, the personality rights have bagged a front seat in contemporary litigations with the High Courts of Delhi and Bombay granting these personality rights to renowned personalities like Aishwarya Rai Bachchan, Amitabh Bachchan, Anil Kapoor, Salman Khan, Karan Johar and even to rising influencers like Raj Shammani. The list goes on, with celebrities demanding these rights to safeguard their identities and to control the commercialisation of their personalities and the associated gains.

With the coming of Gen AI into the picture, it has become more conducive for the exploiters to use the image, voice, name and likeness without taking consent of the concerned celebrity or public figure, causing them economic losses, which is a major part of their sustenance. Also, in some cases causing harm to their dignity and repute. The right to publicity for a person involves multiplicity of rights. "The right to control commercial use of human identity is covered under the right to publicity."[2]

Publicity rights, therefore, emerge as a natural extension of personality rights. When the identity or distinctive attributes of a public figure are used without consent or authorisation, the resulting harm extends far beyond commercial loss. Such unauthorised exploitation intrudes into the personal sphere of the individual and affects their autonomy, dignity, and self-worth. In essence, the misuse of a person's behavioural characteristics such as their image, likeness, or reputation has a dual impact. On the one hand, it contravenes the right to control and

* Associate Professor, Institute of Law, Kurukshetra University, Kurukshetra.
** Student, B. A. LL. B (Hons.) 6th Semester, Institute of Law, Kurukshetra University, Kurukshetra.
[1] *Haelan Laboratories v Topps Chewing Gum Inc* 202 F2d 866 (2d Cir 1953).
[2] *Titan Industries Ltd v Ramkumar Jewellers* (2012) SCC OnLine Del 2382.

INDRAPRASTHA LAW REVIEW

safeguard the economic use of an individual's persona. On the other hand, it infringes upon their right to privacy because the absence of consent erodes personal agency and ultimately undermines the fundamental right to live with dignity.

In the landmark judgement of *DM Entertainment P Ltd* [3], the court created the distinction between the publicity and personality rights, stating "The right of publicity protects against the unauthorised appropriation of an individual's very persona which would result in unearned commercial gain to another."[4] Therefore, it can be said that the Personality rights are multidimensional having varied usage depending on the person demanding i.e whether he is a common man or a celebrity. In case of a common man, personality rights are predominantly exercised as personal rights, largely rooted in the right to privacy and right to dignity. On the other hand, in the case of a celebrity, personality rights include the commercial value of identity as well requiring the intellectual property rights, also termed as transferable rights.

II. HISTORY AND EVOLUTION OF PERSONALITY RIGHTS

The discussion of personality rights and publicity rights as personal and proprietary rights is of recent origin. *Haelan Laboratories*[5] (USA) was the first case to formally recognise the concept of "Publicity Rights." In this case, Haelan Laboratories had entered into exclusive contracts with baseball players to use their photographs on chewing gum products, but Topps induced some players to breach these agreements and authorised the use of their images. The court recognised the exclusivity of the economic value of the celebrities' name and image, and that the law ought to protect it. It established that individuals have a transferable, enforceable right to the economic value of their persona, laying the foundation for modern publicity rights.

The said authority has been used in many Indian landmark judgements, providing a base to the aspect of publicity rights. Though in the Indian jurisprudence, the said right has its roots in Article 21 as stated in the famous judgement of *Justice K.S. Puttaswamy*[6]. The right to privacy is considered inherent under the right to life and personal liberty under Article 21 and as a part of the fundamental freedoms guaranteed by the Constitution.[7] Publicity rights, being a stream of personality rights, follow it.

INDRAPRASTHA LAW REVIEW

[3] *DM Entertainment (P) Ltd v Baby Gift House* (2010) SCC OnLine Del 4790.
[4] *DM Entertainment* (n 3).
[5] *Haelan Laboratories Inc* (n 1).
[6] *Justice KS Puttaswamy (Retd) v Union of India* (2017) 10 SCC 1.
[7] *Puttaswamy* (n 6).

Many cases like *R Rajagopal v State of Tamil Nadu*[8], *Phoolan Devi v Shekhar Kapoor*[9] *and DM Entertainment P Ltd*[10], are the landmark judgements to establish the roots for publicity rights through right to privacy in India.

III. PERSONALITY RIGHTS IN OTHER COUNTRIES

Considering "personality rights" globally, each country has a different jurisprudential aspect governing them, though the underlying concepts of dignity, autonomy, and control over one's persona remain at the heart of it. In the United States, "right to publicity" gained momentum, which further brought up the concept of personality rights, giving people, especially the celebrities the power to commercialise their name, image, voice, and likeness. It extends and protects the right even after death as intellectual property.

In Germany, the right has been granted as an extension of human dignity and personal autonomy, rooted in constitutional protection; leaning towards safeguarding personal identity over the commercial aspect.

The United Kingdom there in absence of any specific personality right under statutory law. It relies on indirect remedies such as passing off, breach of confidence, and data protection laws, requiring proof of elements like goodwill and misrepresentation.

Under India law the right has been recognised through judicial interpretation and has not been yet codified expressly. In this context, Article 21 of the Indian Constitution has been interpreted to protect the dual aspect of right to life while protecting privacy and right to publicity, especially in the case of celebrities.

With all the countries having their respective jurisprudence, the proliferation of artificial intelligence has created great loopholes in the existing framework creating a greater demand for a more coherent and explicit recognition of personality rights as an independent legal right capable of addressing both dignitary and commercial harms in the digital age.

IV. LAW GOVERNING PERSONALITY RIGHTS

Unlike other rights which are specifically protected either under the constitution or via other statutes, Personality rights do not have a specific statute which can be referred to per se; rather, it is derived from various existing laws under the intellectual property law, common law principles, Information Technology jurisprudence and Constitutional Law. Personality rights

[8] *R Rajagopal v State of Tamil Nadu* AIR 1995 SC 264.
[9] *Phoolan Devi v Shekhar Kapoor* (1995) 32 DRJ 142.
[10] *DM Entertainment* (n 3).

INDRAPRASTHA LAW REVIEW

are protected implicitly under various laws and the overview of those protections is discussed hereinunder:

The Copyright Act

The Copyright Act protects personality rights under Section 57 and Section 38B[11]. These provisions confer the right of acknowledgement, enabling creators to claim authorship of their work, and the right of integrity, which protects against any distortion, mutilation, or modification that may prejudice their reputation. Although primarily designed to protect innovative works, these rights also extend to artists- including actors, musicians, and dancers- by preserving their identity and granting them control over the management and modification of their performances.[12]

The Trade Marks Act

Section 14[13] of The Trade Marks Act, restricts the use of behavioural aspects like name, likeness and persona without due affirmation from the owner, offering minimal statutory recognition to the aspect of personality rights. A landmark case in this context is *D.M. Entertainment Pvt. Ltd.*[14], where the High Court of Delhi recognised the economic aspect of personality rights, where dolls imported from China, imitating the personality attributes of the singer Daler Mehndi including his voice, were being sold creating confusion amongst the consumer as it amounted to false endorsement and passing off, diluting the uniqueness of his persona and his goodwill, making it the pioneer in India relating to this aspect.[15]

Remedies under Common Law

Personality Rights are further safeguarded through the common law action of passing off, as well as under the Law of Torts, which offers remedies against acts such as disparagement, libel, and slander.[16] When we talk of passing off, it means the unauthorised usage of the goodwill, services and trademark of a person (i.e. owner) by the other without due consent leading to unfair competition and misrepresentation of the individual involved per se. It is primarily used in the cases of unregistered trademarks.

[11] Copyright Act 1957, ss 57(1) and 38B.
[12] Lexclaim, 'The Evolution of Personality Rights in India' (Lexclaim, 15 October 2025) <https://lexclaim.com/blog/2025/10/15/the-evolution-of-personality-rights-in-india/> > accessed 30 January 2026.
[13] Trade Marks Act 1999, s 14.
[14] *DM Entertainment* (n 3).
[15] *DM Entertainment* (n 3).
[16] *DM Entertainment* (n 3).

INDRAPRASTHA LAW REVIEW

The Information Technology Act

The Information Technology Act[17] primarily governs cyber law because it was enacted to provide legal recognition to electronic transactions and to address cybercrime and for penalising digital crimes. This law protects some facets of right to privacy and personality rights impliedly. Section 66E[18] criminalises capturing, publishing, or transmitting the image of a private area of any person without their consent, under circumstances violating their privacy. Section 66D[19] punishes online cheating carried out by impersonating someone through electronic communication. Although these Provisions are chiefly concerned with safeguarding privacy and preventing identity theft, rather than addressing commercial misuse, they nonetheless lay down an important legal foundation that treats digital identity as a protected and legally significant interest.[20]

V. DISTINCTION BETWEEN PERSONALITY RIGHTS AND PUBLICITY RIGHTS

When we talk about personality rights, they have two facets: one is economic or commercial, and the other is personal, ascertained by the person claiming it. To elaborate, a person may either demand privacy rights, or the right to decide as to who can commercially use the personal attributes like voice, image and likeness etc. especially in the case of celebrities which forms a formidable part of their income generation. The tort of Passing off, in this regard is the most useful remedy protecting the goodwill that is attached to unregistered trademarks. [21] in the present study, we are focused on the commercial aspect of personality rights, which can be termed publicity rights, and this is the main element that sets the two things apart.

Personality rights can be said to be concerned more with the recognition of human dignity and personal autonomy. These rights are inseparable being the fundamental rights and their intrinsic character implies that such rights subsist irrespective of commercial value or public recognition. As recognised in *Basheshar Nath vs. CIT* [22] "fundamental rights are inalienable rights which cannot be assigned or waived by individuals because they serve broader public policy objectives."[23]

[17] Information Technology Act, 2000 ('IT Act').
[18] IT Act, s 66E.
[19] IT Act, s 66D.
[20] Bhatt and Joshi Associates, 'Personality Rights in India: Legal Framework and Judicial Evolution' (Bhatt and Joshi Associates, 7 October 2025) < Personality Rights in India: Legal Framework and Judicial Evolution - Bhatt & Joshi Associates> accessed 30 January 2026.
[21] Samarth Krishnan Luthra and Vasundhara Bakhru, 'Publicity Rights and the Right to Privacy in India' (2019) 31 NLSIR https://repository.nls.ac.in/nlsir/vol31/iss1/6/ accessed 25 January 2026.
[22] *Basheshar Nath v The Commissioner of Income Tax, Delhi and Rajasthan* AIR 1959 SC 149.
[23] *Basheshar Nath* (n 22).

INDRAPRASTHA LAW REVIEW

Publicity rights, on the other hand, are transferable rights meant for economic gains. The person transferring can acquire control over the extent of the transfer. Therefore, it can be said that Publicity Rights are economic in nature.

The usage of both terms interchangeably by the courts has led to great confusion to the public at large, as people on social media are contending as to how can a personality say a celebrity, who is already widely published and popular claim personality rights; but the reality is that they are not claiming personality rights, rather publicity rights. The interchangeable usage is evident from the case of *Aishwarya Rai Bachchan* where the court held that the plaintiff's Personality Rights, including the behavioural aspects, the mannerism and name of the plaintiff, over a period of time acquires a unique distinctiveness, further having economic value as these rights are transferable. Any third-party involvement into the usage of these attributes, that too without permission would cause a serious harm to the repute and dignity of the person involved confusing the general public. "Therefore, no one is entitled to utilise and/or misappropriate and/or imitate any facet of the Plaintiff's personality….. commercially in any manner as it would constitute a violation of the Plaintiff's Personality Rights and liable to be judicially restrained by the Court." [24] So, the court has emphasised upon both the personal and proprietary rights of the petitioner in this case while protecting her reputation, dignity and potential commercial harm that may be caused.

"When the personality rights of an individual are exploited without due permission, the contention is that the right to control when, where and how their identity is used should vest with the famous personality and not that there is a blanket ban on the usage of the personality for commercial purposes."[25] Liability for infringement of the right of publicity is generally found on two essential elements: first, validity, meaning the plaintiff possesses an enforceable proprietary right in the identity or persona of a human being; and second, identifiability, requiring that the celebrity be recognisable from the defendant's unauthorised use. Notably, a claim for infringement of the right of publicity does not require proof of deceptiveness or confusion, particularly where the celebrity is clearly identifiable, and the scope of this right extends beyond the conventional boundaries of law of deceptive advertising.[26]

On reading the recent judgments, one can notice that the courts are not granting "pure" publicity rights. Instead, they are recognising a more comprehensive right that allows individuals to

[24] *Aishwarya Rai Bachchan v Aishwaryaworld.com* (2025) SCC OnLine Del 5943.
[25] *Titan Industries* (n 2).
[26] *Titan Industries* (n 2).

INDRAPRASTHA LAW REVIEW

control the commercial use of their personality while preserving dignity and consent as central pillars. This evolving doctrine is best described as the Right to controlled commercialization.

VI. CLAIMS OF PERSONALITY RIGHTS IN THE ERA OF ARTIFICIAL INTELLIGENCE (AI)

Generative AI has today made it possible to recreate or create art, music, videos and even a full-length film without even actually involving real artists and actors. With just one prompt one can create anything with just smartphone or computer.

AI technologies like Deepfakes that swap faces or voices proliferate misinformation, enabling extortion and manipulation and eroding the public trust. While it is a step towards innovation in the realm of development, its unregulated application threatens to commercialise and reduce human identity to a mere commodity, thereby necessitating strong legal protection. Advanced AI systems have enabled the creation of remarkable visuals, highly realistic animations, and even original music compositions. Their capabilities extend to filmmaking and music production, enabling the digital recreation of deceased or unavailable performers by replicating their voices and physical appearances in new works. While the sophistication of this technology has generated considerable enthusiasm, it has also raised serious concerns, especially as AI-produced likeness increasingly become indistinguishable from real individuals.[27]

The presence of AI created media on the internet, social media platforms particularly the imitation of voices of famous personalities or the usage of celebrity names, images by AI have created quite a stir. The usage/imitation of the voice, image, name of famous personalities violates the rights of such personalities.[28]

Therefore, with the changing dynamics it becomes even more important to regulate the use of these AI tools so that they are used in a just and fair manner, ensuring no harm to any individual relating to identity, dignity, repute, and privacy.

VII. EVOLUTION OF THE RIGHT TO CONTROLLED COMMERCIALISATION

There has been a lot of discussion of personality rights and publicity rights and their potential commercial significance. So, it is important to understand the roots of these rights.

[27] Fatma Zehra and Eesha Kaul, 'Artificial Intelligence and the Law: Safeguarding Personality Rights in the Digital Age' (2024) IJIRL 984 <https://ijirl.com/ >accessed 23 February 2026.

[28] Deepikka R S, 'Legalities and Challenges in Implementing the Charter of Patients' Rights to Telemedicine in India: A Medico-Legal Analysis' IJLMH 1510 <https://ijlmh.com/paper/legalities-and-challenges-in-implementing-the-charter-of-patients-rights-to-telemedicine-in-india-a-medico-legal-analysis/> accessed 23 January 2026.

INDRAPRASTHA LAW REVIEW

Conceptual shift to commercial identity rights

The landmark *Puttaswamy judgement* gave us the "Right to privacy", which aims to protect the dignity, self-determination and autonomy of individuals, protecting them against unfair and unjust intrusions. The judgment recognised privacy as encompassing bodily privacy, informational privacy and decisional privacy (choices relating to family, sexuality, beliefs, etc.) Having privacy at its root, the personality rights came with a wider scope. The doctrine of personality rights has developed through judicial interpretation and comparative legal frameworks to strike a balance between two basic norms: namely, the individual's right to identity and dignity, and secondly, the public's right to information and freedom of expression.[29]

Personality rights are intrinsically connected to a person's reputation and public recognition. The right to publicity and the right to privacy are the core foundation of personality rights, and any infringement upon these rights entitles the affected individual to seek appropriate legal remedies.[30]

The right to controlled commercialisation connotes that although publicity rights are assignable and transferable, once transferred, the transferee doesn't obtain a license to exploit the person's right at the expense of their dignity, repute, goodwill, and social image, which can cause harm to the transferor. At its core, the right to controlled commercialisation is anchored on the principle that identity remains an extension of the self, even when it acquires commercial value. Indian courts have implicitly rejected the notion that fame automatically results in the surrender of personal autonomy over one's identity. Instead, judicial reasoning reflects the understanding that commercial exploitation is permissible only when authorised, contextual, and non-distortive.

The Tripartite Interests related to controlled commercialisation

"Fame can come with its own disadvantages."[31] "Reputation and fame can transcend into damaging various rights of a person."[32] The freedom to speech and expression is a vital one, protecting the free will of the people to express themselves often extending to right to information, satire and parody. But it sometimes curtails the right of the other, when this immunity ingresses into the individual's personal life, leading to jeopardy of their repute and dignity, which is illegal per se.

[29] Lexclaim (n 12).
[30] Lexclaim (n 12).
[31] *Anil Kapoor v Simply Life India* (2023) SCC OnLine Del 6914.
[32] *Anil Kapoor* (n 31).

INDRAPRASTHA LAW REVIEW

The right harmonises three interrelated interests:

- Dignity interests, protecting the individual against misrepresentation and identity distortion;
- Autonomy interest, ensuring meaningful consent over use of personality; and
- Economic interest, safeguarding against unjust enrichment through unauthorised commercial exploitation.

By integrating these dimensions, the right to controlled commercialisation bridges the gap between personality rights and publicity rights while remaining constitutionally grounded.

Commercial Loss and Constitutional Injury

When a dispute relating to the personality attributes of a celebrated person arise, it has two faces, one is about the repute and goodwill infringing the personality and the other is the commercial aspect to control its usage as held in the case of *Aishwarya Rai Bachchan*[33] "The Courts in such cases of unauthorised exploitation of one's Personality Rights, cannot turn a blind-eye."[34]

The Delhi High Court in *Jackie Shroff vs. The Peppy Store*[35] extended protection to nicknames, colloquial expressions, and distinctive speech patterns. The judgement is notable for recognising that personality is not confined to visual likeness but extends to cultural and linguistic markers associated with an individual's public persona. Similarly in *Arijit Singh vs. Codible Ventures*[36] the court restrained the use of AI-generated content reproducing the singer's voice and persona, acknowledging that technology mediation does not dilute the requirement of consent. This judgement firmly situates the right to controlled commercialisation within the digital and AI context.

The emergence of the right to controlled commercialisation signals a paradigm shift in Indian personality rights jurisprudence. Courts are no longer merely preventing unauthorised endorsements but are affirming an individual's authority to dictate the commercial destiny of their identity. This right transcends traditional publicity rights, offering a comprehensive framework that can respond to contemporary technological realities while remaining faithful to constitutional values.

[33] *Aishwarya Rai Bachchan* (n 24).
[34] *Aishwarya Rai Bachchan* (n 24).
[35] *Jaikishan Kakubhai Saraf Alias Jackie Shroff v Peppy Store* (2024) SCC OnLine Del 3664.
[36] *Arijit Singh v Codible Ventures LLP* (2024) SCC OnLine Bom 2445.

INDRAPRASTHA LAW REVIEW

VIII. CURRENT CONUNDRUM

Now, the conundrum amongst the public at large is about the extent of these "publicity rights". The questions regarding the liability for infringement for the creation of a mere fan page or a meme are very significant. The requirement of immunity provided in cases like that of Anil *Kapoor*[37], and *Jackie Shroff*[38], where even the use of the words "Jhakaas" and "Bhidu" would amount to the infringement of the personality rights of the respective public figures are again important while establishing the extent of publicity rights.

We can take a two-pronged approach to it, i.e.

Freedom of speech and expression [Article 19(1)(a)]

The freedom of speech and expression granted by the Indian Constitution under Article 19(1)(a) to each individual, which includes the right to express ideas through satire, parody, criticism, and cultural commentary. In contrast, Article 19(2) stipulates the reasonable restrictions that can be imposed on the grounds enumerated in it. The mere creation of a fanpage, meme or a parody will not amount to infringement unless there is some commercial gain arising out of it, which is induced without taking the consent of the person whose identity is used for such gains, and it has caused a substantial loss to her.

Faith in democracy rests on the dictum: "Let people have the truth and freedom to discuss it, and all will go well."[39] The question to ponder upon is what separates the "right to tell" and "no right to tell" because blanket rights and powers sometimes become dangerous if checks and balances are not checked. [40] Also, the rights if used in a manner that tarnishes the image of the other party or harms the dignity and repute of a well-known personality, such actions can be curbed as previously discussed where the repute and dignity of the well-known star Aishwarya Rai Bachchan was at stake the court declared the immediate cessation of the working of the sites and YouTube channels which were involved in such act. Therefore, people have the freedom to express themselves but not at the harm of others, either dignitary or commercial.

Using public information for commercial speech

The thing to be noted in the majority of the personality rights cases is that the decision is made against John Doe or passed ex parte, leaving no room for the contentions of the other party. Not every person using the name or image of a celebrity can be said to have infringed the publicity

[37] *Anil Kapoor* (n 31).
[38] *Jackie Shroff* case (n 35).
[39] *Hamdard National Foundation v Hussain Dalal* (2013) SCC OnLine Del 2289.
[40] *Hamdard National Foundation* (n 39).

INDRAPRASTHA LAW REVIEW

rights. For example, a small shop owner displaying a picture of a celebrity outside the shop will not make the public at large believe that the shop or the service provided is endorsed by the said personality. Therefore, a mere use of the information as commercial speech, which is already public, will not amount to the infringement of the publicity rights. Whereas, as discussed earlier, if it harms the dignity of the said personality, then personality rights as dignitary rights can be invoked as done in the case of Anil Kapoor. Therefore, a mere reference to a public figure or their attributes is not equivalent to commercial exploitation. Before passing a blanket ban on the use of even catchphrases, like in the case of Anil Kapoor and Jackie Shroff, the court ought to apply the "Confusion Test", i.e. whether or not it is being used for product branding, advertisement or inducement of consumer trust or it is a mere satire, description or artistic imitation. The focus should be "consumer protection" and not "celebrity monopoly." In the case of *ICC Development (Int) Ltd.*[41] the court emphasised that "the slogans merely show that the purchasers of the defendants' goods may win a ticket and travel package to see the World Cup and nothing more."[42]

Therefore, without demonstrable economic loss or reputational harm, injunctions become punitive rather than protective. Thus, publicly available identity markers should attract liability only when their use amounts to deceptive commercial exploitation causing tangible harm.

IX. CONCLUSION

The changing technology has shed some major light on the aspect of personality rights. The rise of Generative AI, deepfake technology, virtual avatars, and digital platforms has transformed major aspects of life, altering them significantly from their previous state. What was once anchored in physical presence and limited media circulation is now infinitely reproducible, editable, and commercially deployable at negligible cost. It is the need of the hour to regulate the ease at which a person's image, voice, likeness, or persona may be appropriated, distorted, or monetised without consent. Awareness to the public at large about the personality and publicity rights is important to make them aware of their expanding rights. As discussed in the paper above, there is a misnomer prevailing in the usage of publicity and personality rights, and a statute clearly stating the scope and extent of both is the need of the hour. The Indian jurisprudence has been using both aspects overlapping each other. Right to controlled commercialisation goes beyond preventing unauthorised endorsements or passing off. It affirms that identity, even when it acquires immense commercial value, remains

[41] *ICC Development (International) Ltd v Arvee Enterprises* (2003) SCC OnLine Del 2.
[42] *ICC Development* (n 41).

INDRAPRASTHA LAW REVIEW

inseparable from the individual's dignity, autonomy, and social standing. The courts, particularly the Delhi High Court, appear to have implicitly rejected the notion that fame entails a surrender of control over one's identity. Instead, they have underscored consent, context and dignity as continuing limitations on commercial exploitation.

An attempt has been made to represent a thin line of difference between the two rights i.e. where personality rights are concerned with the individual's right to privacy rooted in Article 21 of the Indian Constitution, on the other hand publicity rights root from personality rights and the right to privacy which are transferable and have a proprietary nature governed by the intellectual property rights. Commercial benefits of identity may be permitted, but it must remain controlled, non-distortive, and aligned with the individual's autonomy. In this sense, Indian courts are fashioning a uniquely hybrid doctrine; one that is neither purely proprietary nor purely dignitary.

However, the courts need to balance personality rights with the permissible limits of public expression. When courts restrain the use of nicknames, catchphrases, or colloquial expressions that have entered common cultural usage, without a clear inquiry into deception, commercial gain, or consumer confusion, the line between protection and overreach becomes blurred. The absence of consistent standards risks transforming publicity rights from a safeguard against exploitation into a form of celebrity monopoly over language, culture, and public imagination. The two-pronged approach discussed, pretty much addresses the conundrum i.e. people have the right to speech and expression under Article 19(1)(a) which cannot be curtailed by giving monopoly of rights and that the information which is already public when used for commercial purpose cannot *per se* lead to infringement of the personality rights unless it is established that there exists a deception, a considerable number of consumers have been deceived into buying a product or service, false endorsement or unjust enrichment at the expense of the individual. The relevant inquiry must focus on harm, confusion, and misrepresentation, rather than on mere visibility or popularity.

The publicity rights can be legitimate if their extent is defined and they do not curtail expression. Though celebrities have all the rights to prevent fake endorsements making undue profits and to take down defamatory and inappropriate content harming their repute, the courts need to clear the stance as to what would be the extent of these rights.

So, the study contributes to a conceptual framework for the policy formation that can clearly distinguish the implications of publicity rights and personality rights. At the same time, the study raises concerns about creating a balance between personality rights and the rights of public at large. That might be helpful in addressing intricacies of codified law in future.

INDRAPRASTHA LAW REVIEW

The study, however, is limited to the analysis of conceptual aspects of personality rights and publicity rights. The future researchers may undertake the empirical studies to address the questions raised in this study.

X. SUGGESTIONS AND THE WAY AHEAD

- A clear distinction between the personality rights and the publicity rights needs to be established either legislatively or through judicial guidelines.
- Personality rights must be protected as human rights irrespective of the commercial value.
- Publicity rights need to be reconceptualised under intellectual property jurisprudence.
- A more uniform approach needs to be adopted by the courts while dealing with the personality rights cases for personal or commercial injury.
- Awareness to the public at large about both the personality and publicity rights is necessary to avoid any liability for intrusions in the rights of celebrities.
- Given the growing role of AI and digital replication technologies, courts should develop technology-sensitive standards that address deepfakes, voice cloning, and virtual avatars without diluting the centrality of consent and dignity.
- The enforcement of publicity rights must remain subordinate to constitutional guarantees under Article 19(1)(a). Satire, parody, criticism, news reporting, and non-deceptive cultural usage should continue to enjoy robust protection.

INDRAPRASTHA LAW REVIEW

MOUNTING TIME POVERTY AND CARE GAP: PRIORITIZING SYNERGY BETWEEN PROTECTION INVESTMENTS AND INCLUSIVE ECONOMIC GROWTH

- Dr. Anjali*
- Parineet Chadha**

ABSTRACT

Globally, the economy of India is progressing at a tremendous speed experiencing robust growth, and perhaps, projected as one of the fastest growing economies. India's progress has been commendable towards gender inclusivity, especially in the area of education which has the immense potential of increasing women's meaningful participation in the economic growth. This progress has been fuelled by transformative policies, reforms and well-laid strategies. At the same time, Time Poverty and the Care Gap are gripping the Indian economy. Excessive unpaid care work leads to time poverty with multiple consequences such as, limited female labour force participation, hindered economic growth, gender inequality and violation of basic human rights of women. Boosting proportionate investment in the care ecosystem has the potential to bring transformative economic and social justice and enhances the probability of narrowed gender gaps in the labour market. Additionally, emerging turbocharged economies will have a significant dimension added to it which is presently unaccounted for in estimates of GDP and economic growth. In this background, the present research analyses the overall impact of Time Poverty and Care Gap. The paper attempts to assess the present position of India with respect to the time poverty and associated care economy in terms of law, policy and strategy already in place. The research adopts a doctrinal method, which also aims to evaluate the efficacy of some of the successful model's world over to assist in framing some better strategies to protect basic human rights of women and taking India closer to achieving some of the Sustainable Development Goals.

Key words: Time poverty, Care ecosystem, Transformative justice, Human rights, SDGs

I. INTRODUCTION

India's growth focused policy discussions often prioritize GDP figures, population benefits, and industrial progress. Rarely do people talk about the care economy as an implicit yet critical underpinning of our economy. When discussing the care economy, the purple economy and time poverty with Indian policymakers and academics, it is critical to first establish common definitions of these terms that tie back to gendered distortions in the labour market and inclusive growth's failure to materialise.

Macroeconomic policy almost exclusively focuses on investment, industry and growth without accounting for the infrastructure that allows human capital to reproduce and take care of itself. In its simplest definition, the care economy refers to the "range of activities that are carried out in order to maintain and assist the continued living of people, as well as care for and reproduce their capacity to work and add economic value."[1] In India, there has been a historically low

* Assistant Professor, Vivekananda School Of Law and Legal Studies, VIPS.
** Student, Vivekananda School of Law and Legal Studies.

[1] International Labour Organization, *Care Work and Care Jobs for the Future of Decent Work* (ILO 2018).

INDRAPRASTHA LAW REVIEW

female labour force participation rate despite improved access to education for women pointing to the unequal care economy as a bottleneck to their ability to achieve inclusive growth.[2]

This study questions the traditional division between *productive* and *reproductive* labor by approaching it from a feminist political economy perspective. The care economy can be broken down analytically into three interconnected parts: paid care work done in markets or state supported systems; unpaid care work done in households; and public care infrastructure that makes caregiving possible. According to data from the National Statistical Office's Time Use Survey (TUS) Indian women spend significantly more time than males on unpaid domestic and caregiving tasks, exposing a significant structural imbalance in the distribution of family labor.[3] However, paid care providers such as ASHAs, Anganwadi workers, nurses, domestic workers, and community health workers frequently work in insecure employment arrangements with honoraria, informal contracts, and little social protection,[4]

Unpaid care work is still not included in national revenue accounting frameworks like GDP despite its fundamental role in promoting economic sustainability. Household labor is statistically invisible since traditional macroeconomic statistics only take into account market transactions. By normalizing women's unpaid labor as a private family obligation rather than acknowledging it as an economic contribution that supports the formal economy, feminist economists contend that this invisibility upholds structural gender inequality.[5] Economic growth plans in India seldom incorporate care responsibilities into labor market forecasting, fiscal planning, or productivity analysis, which has substantial policy ramifications. Therefore, growth is calculated without taking into consideration the unpaid labor that makes it possible.

This discussion has also been influenced by the recent emergence of a broader normative framework relating to international policy discussions surrounding what has been called the purple economy. The purple economy represents a significant shift in thinking regarding care as not only a sector of economic activity but as a public good that deserves normative recognition, redistribution, and public investment. In other words, the purple economy represents an argument for considering care as a public good versus assigning all responsibility to individuals on their own.[6] This broader perspective of care is aligned with the theoretical

[2] World Bank, *World Development Indicators: Female Labor Force Participation Rate (% of Female Population Ages 15+)* (World Bank 2023).
[3] National Statistical Office, *Time Use in India, 2019 as well as 2024* (Ministry of Statistics and Programme Implementation, Government of India).
[4] ILO (n 1).
[5] Rania Antonopoulos and Indira Hirway, *Unpaid Work and the Economy: Gender, Time Use and Poverty in Developing Countries* (1st edition, Palgrave Macmillan 2010).
[6] ILO (n 1); United Nations, *Transforming Our World: The 2030 Agenda for Sustainable Development* (UN 2015).

INDRAPRASTHA LAW REVIEW

framework of social reproduction. In other words, care is viewed through the lens of social infrastructure that supports individuals to participate in the workforce and utilize their potential to the fullest. By viewing care as an investment in productivity, rather than as part of a welfare system or an afterthought, the purple economy challenges prevailing macroeconomic thinking.[7] Overwhelming demands for unpaid care limit women's access to leisure, work, education, and political participation. From a human rights standpoint, time poverty affects rights to health,[8] economic participation,[9] education,[10] and political voice[11] that are protected by international human rights instruments and universal call to action like the Sustainable Development Goals. The care diamond model, which identifies four primary actors-the state, the market, families or households, and the community allows us to comprehend how caregiving responsibilities are distributed.

Since there are few affordable options and inconsistent public services, the balance in India is significantly skewed towards families, particularly those of women and girls.[12] The government provides focused health, nutrition, and maternity care programs, but these frequently lack coordination and fall short of creating a comprehensive approach to care. Private services, such as daycare and elder care, are available but, depending on income, are often unaffordable for many. In the meantime, self-help networks and community organizations offer some assistance, but they cannot take the place of ongoing public funding. Because of this, women are primarily responsible for social reproduction, which exacerbates already-existing gender and economic inequality.

A disproportionate amount of domestic and caregiving duties fall on women, leading to cumulative time deficits that limit political engagement, lower earning potential, impact health outcomes, and restrict labor force participation. The necessity of incorporating care into macroeconomic strategy is highlighted by India's consistently low female labor force participation rates and growing demographic care demands.[13]

The major research questions of this study are how women's economic participation in India is hampered by time poverty resulting from unpaid care work and what institutional changes are required to incorporate the care economy into macroeconomic policy? In order to respond to these questions, the study also looks at the gendered distribution of unpaid care work in India,

[7] Amartya Sen, *Development as Freedom* (Oxford University Press 1999).
[8] International Covenant on Economic, Social and Cultural Rights 1966, art 12.
[9] ICESCR (n 8) art 6.
[10] Convention on the Elimination of All Forms of Discrimination against Women 1979, art 10.
[11] CEDAW (n 10) art 7.
[12] National Statistical Office (n 3).
[13] World Bank (n 2); ILO (n 1).

INDRAPRASTHA LAW REVIEW

assesses the shortcomings of the country's current legal and policy frameworks in addressing care deficits, and compares Nordic care regimes to find institutional principles that can be modified for the Indian setting. The reason behind studying Nordic countries is their top rankings in the World Economic Forum's Global Gender Gap Index. They appear to lead the world in closing the gender gap.[14]

The study follows a doctrinal and policy analytical methodology. In this context, the study has relied on existing literature, legal provisions, judicial decisions, government reports, and also international institutional frameworks in understanding the legal and policy aspects of the care economy. In this context, the study also makes use of empirical data provided by the National Statistical Office on the Time Use Survey, the Periodic Labor Force Survey, and other relevant data to understand the aspects of unpaid care work and time use in India.

II. EVIDENCE ON TIME USE AND TIME POVERTY IN INDIA

Using comprehensive data, this section provides a secondary empirical analysis based on nationally representative datasets including the TUS and labor force studies from the National Sample Survey Office and the World Bank, this section provides an empirical assessment of the scope and characteristics of unpaid care work in India. Further information from the National Family Health Survey (NFHS) is used to illustrate impacts of time poverty on health and household wellbeing. It is demonstrated that unpaid care work is pervasive in India and far from being marginal, it is systemic, gendered and structurally associated, many a time, with women's exclusion from the labour market.[15]

There is a clear gender disparity in the rate of labour force participation of women, according to the TUS 2019 and TUS 2024.[16] It has been noted from the survey of 2019 that women's 85% time is devoted to unpaid work like cooking, cleaning and childcare. Regarding the participation of women in employment, their modest entry in the paid labour can be observed. However, data demonstrates a shifting but persistent gender pattern in the area of employment and unpaid work mainly among Indians aged between fifteen to fifty-nine.

[14] WEF's Global Gender Gap Report 2025 < https://reports.weforum.org/docs/WEF_GGGR_2025.pdf > accessed 3 January 2026.

[15] National Statistical Office (n 3).

[16] Press Information Bureau, 'Major Findings of Time Use Survey 2024' (Government of India, 2025) <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2106113&reg=3&lang=2;> accessed 3 January 2026. Also,
Observer Research Foundation, 'Underlining the Work That Women Do: Findings from Time Use Survey 2024' (2025)<https://www.orfonline.org/expert-speak/underlining-the-work-that-women-do-findings-from-time-use-survey-2024> accessed 3 January 2026 .

INDRAPRASTHA LAW REVIEW

Among Indians falling in this age bracket, 41% of women engage themselves in household caregiving work as compared to 21.4% of men, with females averaging 140 minutes per day versus 74 minutes of their male counterparts. Female participants in this age group reduced unpaid services from 315 minutes per day in 2019 to 305 minutes in the year 2024 signaling a gradual shift towards paid employment. However, figures clearly show that unpaid caregiving responsibilities are still predominantly performed by women in all socio-economic groups. Unpaid care, being overwhelmingly feminized, structurally restricts women's participation in paid employment. Women continue to be primarily responsible for household chores even when they do paid work. The structural imbalance is further highlighted by the intensity of time allocation.[17]

There is an empirically substantial correlation between unpaid caregiving and female labor force participation (FLFP). India's FLFP rate has consistently been lower than male participation rates, according to labor force estimates produced by the Periodic Labour Force Survey and reflected in the World Development Indicators.[18] Women's access to paid work is limited by excessive unpaid labor, which often results in their leaving the workforce after marriage or motherhood.[19] Many women who continue to work do so in flexible, home based, or informal settings that accommodate the responsibilities of caregiving. Wage penalties, delayed career paths, and restricted upward mobility are all consequences of this fragmentation. Crucially, a cross analysis of TUS and PLFS data shows that most unpaid domestic labor is still performed by women in paid jobs, suggesting cumulative rather than substitutive work pressures.

This idea fits with the double shift idea in feminist economics where women do paid work, and then unpaid work at home. In India, though, this is often a triple shift as it also includes duties to the community, and taking part in social life. Because of all this, the total hours women work paid and unpaid are usually more than men, but only the paid work is counted in official economics.[20] Information from NFHS also shows links between a lot of housework, risks to mother's health, and less happiness, showing how badly being constantly short of time affects health.[21]

[17] Press Information Bureau (n 16); Observer Research Foundation (n 16).
[18] World Bank (n 2).
[19] Maithreyi Krishnaraj, *Motherhood in India: Glorification without Empowerment?* (South Asian Edition, first published 2010, Routledge 2019).
[20] World Bank (n 2); ILO (n 1).
[21] National Statistical Office (n 3).

INDRAPRASTHA LAW REVIEW

A lack of free time is becoming a very important thing to look at while thinking about hardship. It is really the condition of having no time left to do what one wants, once people take into account work they get paid for, household duties and looking after others for no pay, and the personal things they need to do to stay healthy. Women, who do a lot of unpaid work frequently, more than five hours a day, have very little time for enjoyment or to develop their abilities. This limits the opportunities they have for study, involvement in politics, starting a business, and improving their position in society. The lived realities of time poverty are further demonstrated by micro-level research. For instance, research on women homeworkers in Tamil Nadu shows that women simultaneously engage in paid production and unpaid domestic work throughout the day, often working from early morning until late night with minimal leisure, reflecting the intensity of the double and triple shift phenomenon.[22]

Research findings show that all women in India perform unpaid care work which they share among themselves and their work shows a direct connection to reduced female labor force participation and capability deprivation. The term *out of the labour force* which employers use to classify women workers actually hides the facts about women's essential work which they perform for both their families and the community at large. The solution to gender inequality problems in India needs a robust care ecosystem with structural reforms which must include building care facilities and creating systems for resource distribution instead of using small welfare programmes to address the issues.[23]

III. GLOBAL AND NATIONAL DISCOURSE ON THE CARE/PURPLE ECONOMY

A major change in global economic thinking is reflected through the development of the care economy and the more normatively framed purple economy. Macroeconomic discourse historically placed a premium on market productivity, capital accumulation and industrial growth while relegating household caregiving to the private sphere. Nonetheless, in the last ten years, the International Labour Organization (ILO) and the United Nations system have emphasized care work, both paid and unpaid, as essential to decent work and sustainable development.[24] This new paradigm views care as the invisible infrastructure that supports economies rather than as a residual welfare activity.

[22] Iswarya Priya Jagannathan and Amrita Datta, 'How Care Shapes Work: Homeworkers in the Leather Value Chain, Tamil Nadu' (2025) 60 EPW 7.
[23] Rama V. Baru and Pallavi Gupta, 'India Needs to Develop a Care Ecosystem' *The Hindu* (Delhi, 28 August 2024) 7.
[24] ILO (n 1); United Nations (n 6).

INDRAPRASTHA LAW REVIEW

The Care Economy or Purple Economy, as defined by the UN, reframes care along four interconnected axes: as a human rights imperative associated with equality, dignity, and social justice; as a public good rather than a private household obligation; as social infrastructure comparable to physical infrastructure; and as an employment generator with strong multiplier effects.[25] The existing market system which allows people to receive benefits without paying for them faces opposition from this system which creates free-riding in market economies through its requirement that women perform unpaid caregiving work. The economy maintains gender inequality through its practice of shifting social reproduction costs onto women who perform unpaid work.

The 5R framework Recognition, Reduction, Redistribution, Rewarding, and Representation is essential to international discourse as it offers a conceptual foundation for the creation of policies. In order to be recognized, unpaid care must be systematically measured in national accounts and labor statistics, whereas to reduce the time burden of unpaid labor, infrastructure such as water access, childcare facilities, healthcare systems, and energy services must be invested in. The goal of redistribution is to divide caregiving duties more fairly between men and women as well as among the community, market, and state as stakeholders. Rewarding places a strong emphasis on paid care workers' labor rights, social protection, and fair compensation. Encouraging caregivers and frontline employees to take part in collective bargaining and policy-making processes is necessary for representation.[26] Together, these ideas support macroeconomic restructuring that incorporates care into social security programs, labor laws, and budgetary planning rather than making little benefit changes.

The contemporary global discussion increasingly defines social infrastructure through the lens of care work. In the same way as transportation systems and digital networks create economic pathways for trade, care systems establish pathways for people to join the workforce while they develop their skills. The fields of early childhood development, eldercare services and primary healthcare return human capital and productivity gains which result in better intergenerational economic mobility for their investors. Care-focused policy aligns with Gender Equality (SDG 5), Decent Work and Economic Growth (SDG 8), Good Health and Well-being (SDG 3), and Reduced Inequalities (SDG 10) within the Sustainable Development Goals framework.[27] The purple economy establishes care work as a point where organizations achieve their productivity

[25] World Bank (n 2); ILO (n 1).
[26] World Bank (n 2); ILO (n 1).
[27] ILO (n 1); United Nations (n 6).

INDRAPRASTHA LAW REVIEW

goals through social justice efforts that show that economic expansion and social equity are interconnected.

The Indian public has developed greater interest in discussing the care economy since 2020 mainly due to policy discussions, economic editorials, and think tanks describing caregiving work as the fundamental element that supports all economic development. The state has not yet established the purple economy as an official policy term, yet public discussions about unpaid care work have become essential for understanding female workforce participation and demographic transitions and gender-responsive budgeting. The Indian population structure, which consists of a large working-age group and a fast-growing senior citizen demographic, increases the need for caregiving services. The public sector provides only limited funding for caregiving services which creates an unmet demand for care needs and forces families to take on most of their caregiving duties.

India has considerable gaps but partial congruence when compared to the 5R framework. The National Statistical Office's TUS which systematically measures unpaid care work has moved from recognition.[28] However, to our knowledge neither macroeconomic modeling nor national income accounting have actually incorporated these findings. Progress has been slow on reducing, in particular for the large number of female farmers working mostly without pay both at home and fields, well out of reach of clean energy, transportation, sanitation or water access. Given that most policies focus on women as beneficiaries and not exacerbating gender norms, policy actions hardly ever specifically target redistribution within-household.[29] Since the wages of frontline employees like ASHAs and Anganwadi workers are honorarium-based without all labor rights, rewards still fall short. Institutional processes are not accessible or only limitedly so, care workers cannot engage in collective bargaining nor decision-making.[30]

Indian feminist economists demonstrate that economic theories and policies fail to recognize the value of unpaid care work. The system operates according to its established patterns. The three scholars Bina Agarwal, Jayati Ghosh and Devaki Jain have highlighted relevant issues in this regard. A study shows that household labor distribution which follows traditional gender roles creates economic value that remains invisible to national economic measurements. Agarwal's family research explains domestic relationships and shows how women face economic disadvantages because resources and time get divided between family members.. Ghosh analyzes the situation from a broader perspective. The economy suffers from

[28] National Statistical Office (n 3).
[29] World Bank (n 2); ILO (n 1).
[30] United Nations (n 6).

INDRAPRASTHA LAW REVIEW

macroeconomic growth strategies that discount the value of care work. Jain's research connects care work to development issues which include social justice and equity. The first part connects everything together while the second part demonstrates different connections. The studies show that statistical errors lead to invisible results which multiple studies have documented. The problem exists as an actual structural problem. To achieve systemic equality, there is a need to incorporate care work into both the economic system and legal framework as well as policy development. The process operates through multiple paths which require clarity to understand. The research demands that academic study should include that integration.[31]

When taken as a whole, these interventions show that care related needs are acknowledged, but they also highlight governance fragmentation. The ministries of Women and Child Development, Health and Family Welfare, Rural Development, and Social Justice all have different responsibilities, and there is not a single care policy architecture. Coordinated impact is limited because budgetary allocations are still dispersed across sectors. Furthermore, care considerations are rarely incorporated into industrial policy, labor law reform, or larger macroeconomic planning.

The main conflict in India's care discussion happens because international standards differ from how Indian institutions operate. International standards define the purple economy as a transformative system that needs redistribution and structural investment and rights-based protection to operate. Bridging this gap needs all parties to redefine care as essential social infrastructure which drives inclusive development instead of viewing it as excess social spending. The transition from unconnected programs to a unified economic plan focused on care delivery will improve gender equality and increase workforce participation and help India achieve its sustainable development goals.

IV. HUMAN RIGHTS LINKAGES IN INDIA'S CARE ECONOMY INTEGRATION

The care economy in India transcends its function as a developmental and welfare matter because it connects with the constitutional framework and human rights framework. The unpaid care work which women perform at higher rates than men create systemic gender discrimination while it prevents achievement of real equality between genders. The Constitution of India establishes equality rights through Article 14 which allows all people to

[31] Bina Agarwal, *A Field of One's Own: Gender and Land Rights in South Asia* (South Asian edition, Cambridge University Press 1994); Jayati Ghosh, 'Recognising Women's Work as Economic Activity' (2013) 48(10) EPW 17; Devaki Jain, Women, Development, and the UN: A Sixty-Year Quest for Equality and Justice (1st edition, Indiana University Press 2005).

INDRAPRASTHA LAW REVIEW

have equal legal rights and through Article 15 which protects from discrimination based on their sex.[32] The primary need for women to perform unpaid domestic work and caregiving duties creates a barrier which stops them from attaining paid work and participating in public life and achieving financial freedom. Women face direct discrimination because these restrictions create an environment which supports patriarchal standards that treat women's mandatory unpaid work as normal while it stops them from accessing proper formal employment opportunities. The Supreme Court has extended Article 21's right to life and personal liberty to cover dignity, health and humane living conditions, which women experience through unpaid caregiving that leads to chronic time deprivation and exhaustion.

The constitutional basis for incorporating care into economic governance is further strengthened by the Directive Principles of State Policy. Equal pay for equal work is provided under Article 39(d), the State is required by Article 42 to guarantee fair and humane working conditions and maternity relief, and early childhood care and education are covered by Article 45.[33] These principles express a vision of social justice that acknowledges caregiving and reproductive labor as issues of public concern, despite the fact that they are not subject to legal action. However, there is still a persistent gap between constitutional aspiration and lived reality because implementation is still dispersed and small-scale.

Legal scholarship in India has emphasised that women's unpaid domestic labour, though central to family and social structures, has historically remained undervalued within legal and economic systems.[34] However, the acceptance of caregiving in constitutional interpretation has gradually grown as a result of judicial rulings. Recently, the Delhi High Court's ruling in *Rakesh Ray* v. *Priti Ray*[35] acknowledged homemakers' unpaid domestic work as asset-building labor. The court specifically highlighted that homemaking, which comprises managing the household affairs, raising children, and helping the earning spouse, counts as valuable labor that enables smooth functioning of the family. There have been many instances where the Supreme Court and various high courts have given liberal interpretation to the paid work necessarily including unpaid carework undertaken by women. Positive judicial attitude towards women's active participation in the economy is not a new phenomenon, rather it has a long history. For instance, the Supreme Court emphasized long back in *Vishaka* v. *State of Rajasthan* that structural gender discrimination in the workplace violates Articles 14, 15, and 21,

[32] Constitution of India 1950, arts 14 and 15.
[33] Constitution of India, arts 39(d), 42 and 45.
[34] Lalita Dhar Parihar, *Women and Law: From Impoverishment to Empowerment -A Critique* (1st edition, Eastern Book Company 2011).
[35] *Rakesh Ray v Priti Ray*, CRL. REV. P., 718/2024 & CRL.M.A. 16466/2024.

INDRAPRASTHA LAW REVIEW

providing a more comprehensive framework for comprehending the relationship between equality, dignity, and women's labor participation.[36] The Court long ago extended maternity benefits to even daily wage workers in *Municipal Corporation of Delhi* v. *Female Workers*, ruling that maternity assistance is a fundamental human right derived from Article 42 read with Article 21.[37] Crucially, the ruling highlighted that being a mother and providing care are social roles that call for government assistance rather than personal duties. The historical invisibility of unpaid care work has been well challenged by these judicial developments, which progressively move it into the category of legally cognizable economic contribution.

These changes are indicative of a growing judicial acknowledgement of unpaid caregiving as economically valuable labour within compensatory and constitutional frameworks. This acknowledgement, however, is still mostly context-specific and has not yet solidified into an all-encompassing legal framework that ensures enforceable rights to childcare, eldercare, or more general care-related social protection.[38]

India's international human rights obligations further reinforce the normative case for a care-centered framework in India. Under the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) India committed towards eradicating discrimination in employment, family relations and social protection systems. General Recommendations of CEDAW appear to align closely with the global 5R framework around recognising, reducing and redistributing unpaid care work. In as much, articles 9 and 10 of the ICESCR require states to implement social security policy for families also in order to provide protection against mothers. Such measures presuppose a responsibility to establish systems and benefits including affordable childcare, paid maternity leave, and social pensions that reduce unpaid time burdens.[39] Equally important are the principles enshrined in ILO Conventions No. 156 and 183 on Workers with Family Responsibilities and Maternity Protection respectively that promote joint-burden of care responsibilities by men as well address workplace accommodations. The failure of India to align its policies towards these progressive conventions highlight a notable disconnect between international standards and domestic law.[40]

Environmental justice and climate justice together are also linked with care injustices. Care burdens from the effects of climate change such as floods, droughts and heatwaves create an

[36] *Vishaka v State of Rajasthan* AIR 1997 SC 3011.
[37] *Municipal Corporation of Delhi v Female Workers* (Muster Roll) (2000) 3 SCC 224.
[38] *Kirti v Oriental Insurance Co Ltd* (2021) 2 SCC 166; *Arun Kumar Agrawal v National Insurance Co Ltd* (2010) 9 SCC 218.
[39] ICESCR (n 8) arts 9 and 10.
[40] ILO Convention No 156; ILO Convention No 183: ILO (n 1).

INDRAPRASTHA LAW REVIEW

increased amount of unpaid labour including, for example, collecting water, managing food security and caring for the health of their families. Women who are marginalized from rural areas are predominantly impacted. As a result of a *M.C. Mehta* v. *Union of India* case,[41] the Supreme Court held that the right to a healthy environment is a major constituent of the right to life. When environmental degradation creates more unpaid care duties, both environmental rights and gender equality are negatively impacted. In addition, many women living in areas sensitive to the impacts of climate change will experience multiple risks relating to their own health as mothers (maternal health), employment security and personal safety creating another level of intersectionality for them. Finally, all issues raised herein are consistent with the recommendations from the Universal Periodic Review (UPR) at the global level to implement gender-sensitive adaptation strategies to address climate change.

From a capability perspective, time poverty constitutes the deprivation of substantive freedom. Development, according to Amartya Sen, should expand the real freedoms people have to pursue lives they have reason to value. When unpaid care work occupies a disproportionate share of women's time, it restricts their opportunities for education (the development of skills and knowledge), income generation (participation in the labour market), political engagement (participation in political processes), and leisure, thereby constraining the expansion of their capabilities.[42] Time poverty is also implicated in rights enshrined in international human rights law, including the right to rest and leisure and the right to participate in public life.[43] So unpaid care work should also be understood not only as an economic inefficiency but as a structural deprivation of rights relevant to dignity and equal citizenship.

Policy discourse is transformed when care is framed within the human rights paradigm. It changes the topic of discussion from welfare supplementation to international compliance and constitutional obligation. Realizing substantive equality under Articles 14 and 15 and dignity under Article 21 requires integrating care into India's economic planning through increased public childcare, improved maternity protections, social security for informal workers, and formal recognition of paid care labor.[44] These changes would also help India fulfill its obligations under the Sustainable Development Goals, especially SDG 8 on decent work and SDG 5 on gender equality.[45] Ultimately, the acknowledgement of unpaid care work as a human

[41] *M.C. Mehta v Union of India*, AIR 1987 SC 965.
[42] Amartya Sen (n 7).
[43] ICESCR (n 8) art 7(d); International Covenant on Civil and Political Rights art 25.
[44] Constitution of India, arts 14, 15 and 21.
[45] United Nations (n 6).

INDRAPRASTHA LAW REVIEW

rights issue forces legislative, executive, and judicial institutions to view care as a fundamental component of social justice and democratic citizenship rather than a private family issue.

V. GUIDANCE FROM COMPARATIVE STUDY OF CARE AND TIME-USE MODELS

To comprehend how institutional design influences time use, labor-market participation, and gender equality, a comparative analysis of care regimes is essential. According to Jane Lewis, modern welfare states increasingly follow the adult worker model, which presupposes that both men and women should engage in paid employment.[46] However, rather than advancing equality, this expectation runs the risk of increasing time constraints, especially for women, in the absence of commensurate public investment in caregiving systems.[47] A dual-earner/dual-carer regime, which integrates paid work and shared caregiving through coordinated policies in parental leave, Early Childhood Education and Care (ECEC), long-term care, and social protection, is widely considered to be exemplified by the Nordic countries.

In countries like Sweden and Iceland, parental leave systems are generous, earnings-related and explicitly designed to foster gender equality. Because leave benefits are usually funded through social insurance rather than employer liability, this protects labour-market attachment and minimizes discrimination against women.[48] A hallmark of these regimes has been their inclusion of nontransferable daddy quotas, in which a portion of paid leave is set aside for fathers only. This design feature works not just as income support but also a behavioral tool: evidence from multiple countries suggests (where leave is parental and non-transferable) that father's uptake is substantially increased, translating into sustained increases in men's take-up of unpaid care work.[49] This is why parental leave policy can be understood as a lever for changing intra-household gender norms, not just time off from work for mothers.

The second pillar of the Nordic model is near-universal access to publicly subsidized ECEC. Childcare services are treated as social rights rather than residual welfare benefits. Municipal authorities must provide childcare placements for children whose parents complete their parental leave period because this requirement supports ongoing care between home-based and institutional services.[50] The work balance requires parents to take leave and use childcare

[46] Jane Lewis, 'Balancing Time to Work and Time to Care: Policy Issues and the Implications for Mothers, Fathers and Children' (2009) 21(4) *Child and Family Law Quarterly* 443.
[47] Jane Lewis (n 46).
[48] ILO Convention No 156; ILO Convention No 183: ILO (n 1).
[49] Organisation for Economic Co-operation and Development, *OECD Family Database and Gender Equality Indicators* (OECD 2023).
[50] Jane Lewis (n 46).

INDRAPRASTHA LAW REVIEW

services which enables them to maintain their employment. The system provides affordable fees through income limits while public funding ensures that all social classes can access services. The predictable transition from leave to ECEC creates a path that helps mothers maintain their professional careers while staying connected to the workforce.

The third structural component is extensive provision of publicly financed long-term care for seniors and people with disabilities. Residential care continuum: Municipal governments in Nordic countries provide home-based services, day-care centers as well as residential facilities.[51] Through the social division of responsibility for elder care, these regimes also reduce the total burden on family members (especially middle-aged women) over time. As Lewis notes, however, in practice policy instruments can lead to either reaffirm the familiarization of care or a processual de-familiarization, as discussed, the Nordic model embodies an explicitly redistributive and gender equalizing strategy.[52]

Nordic countries have high rates of female employment and narrower gender gaps in unpaid work due to the interplay of their policies:

1) Earnings-related parental leave keeps parents formally connected to the workforce;
2) Guaranteed Early Child Education and Care (ECEC) services help make re-entry into the labour force possible;
3) Publicly supported long-term care services lessen the cumulative effect of care demands throughout one's lifetime.

That is, the three combined create an environment that produces large numbers of women who are able to participate meaningfully in the labour force.[53] Conversely, in those countries (such as India) that still rely on the family to provide most of the care, there are substantial differences in the amount of unpaid care that men and women provide. For instance, Indian women spend about two hundred and eighty-nine minutes a day on unpaid domestic services, while men spend about eighty-eight minutes and also women devote one hundred and thirty-seven minutes a day to unpaid caregiving activities, while men devote roughly seventy-five minutes, underscoring the ongoing gender disparity in unpaid caregiving.[54]Additionally, although educational levels of women are rising in India and despite emphasis being placed on economic growth by the government, women continue experiencing challenging issues related to non-

[51] OECD (n 49).
[52] Jane Lewis (n 46).
[53] OECD (n 49).
[54] Ministry of Statistics and Programme Implementation, Time Use in India 2024 (National Statistical Office, Government of India 2025); Press Information Bureau, 'Major Findings of Time Use Survey 2024' (Government of India, 2025).

INDRAPRASTHA LAW REVIEW

market, unpaid care responsibilities that make it difficult for them to participate fully in the labour force. The experiences of Iceland and Sweden show how labor-market attachment is strengthened by continuity in care policy. The motherhood penalty is lessened and extended work interruptions are minimized by Sweden's legal guarantee of childcare after paid parental leave. Iceland's equal division model, which gives each parent a set number of months of leave, has resulted in high rates of paternal uptake and quantifiable increases in fathers' participation in day-to-day caregiving duties.[55] These instances support Lewis's claim that social norms and policy design are interdependent; institutional incentives can progressively alter behavioral expectations.[56]

However, we also need to be cautious in transferring Nordic regimes to India. Nordic welfare states engage within high-tax, high-compliance economies with comparatively low labour-market informality and strong traditions of universal social protection. India, on the other hand, is grappling with structural constraints, limited fiscal space, a large informal workforce, heterogeneity of administration across states and entrenched gender norms among them. As Lewis warns, the same policy instruments can have different results according to national labour-market structures and socio-cultural frameworks.[57] As such, direct transplantation is neither possible nor practical.

India should develop its own adaptable design principles through its own research instead of using existing institutional models. The combination of universalism and progressivity provides a solution that enables widespread access while maintaining fiscal viability. The financing of parental leave through social insurance systems will decrease employer bias while creating fair cost distribution.[58] The existing Anganwadi system requires both expansion and quality improvements to establish rights-based access to childcare services which will deliver reliable assistance to parents who work. The introduction of non-transferable paternity leave will create a social shift which encourages parents to share their responsibilities for childcare. The creation of national standards and accountability systems will improve local government service delivery by connecting various fragmented programs.

All things considered, the Nordic dual-earner regime shows how integrated investments in long-term care, ECEC, and parental leave may greatly increase female labor market participation while balancing time utilization between men and women. The fundamental

[55] OECD (n 49).
[56] Jane Lewis (n 46).
[57] Jane Lewis (n 46).
[58] ILO Convention No 156; ILO Convention No 183: ILO (n 1).

INDRAPRASTHA LAW REVIEW

realization is still applicable: care should not be viewed as a residual household duty but rather as a productive social infrastructure integrated into macroeconomic policy. Adopting these ideas provides a method to lessen time poverty and promote equitable growth in India, where unpaid care is still disproportionately feminized and policy frameworks are still disjointed.

VI. INTEGRATING CARE/PURPLE ECONOMY INTO INDIAN POLICY: BARRIERS, DESIGN FRAMEWORK, AND INSTITUTIONAL PATHWAYS

The Indian economic system needs to recognize the complete purple economy through its entire system of welfare programs which currently functions as separate programs. The Ministry of Finance through the Economic Survey 2023-24 and 2024-25 has identified the care economy as essential for empowering women and fostering inclusive economic development. A Press Information Bureau report has estimated that women's unpaid care work may account for between 5% and 17% of Gross Domestic Product (GDP) depending on valuation methods.[59] This high-level recognition establishes an important transformation in discourse. The process of implementation exists at a shallow level. Public funding for childcare services, elder care and disability support together with paid leave remains underfunded and disorganized and society continues to view care work as a duty of individual households instead of essential economic support. The Nordic welfare states of Sweden and Iceland establish an institutional framework that uses universal services and enforceable entitlements to implement care services through their fiscal systems and labor market policies and social insurance programs. The gap between what people say and what institutions do causes India to fall behind Nordic countries in implementing care-focused policies.

The primary impediment is the low level of public funding and the fragmented nature of the public investment. India allocated less than 1% of its GDP to a narrow selection of care-focused programmatic interventions, with funding typically directed toward benefit transfers rather than toward broad-based programmatic service delivery.[60] The Integrated Child Development Services (ICDS) programme facilitates access to supplemental nutrition and early childhood services; however, it is significantly underfunded in comparison to the demand for services, and many Anganwadi centres have serious deficiencies in capital and staffing levels.[61] Long-term care (LTC) for seniors and persons with disabilities is mostly provided by family members,

[59] Ministry of Finance, *Economic Survey 2023–24* and *Economic Survey 2024–25* (Government of India); Press Information Bureau, 'India's Care Economy' (2024).
[60] Ministry of Finance (n 59).
[61] National Statistical Office (n 3).

INDRAPRASTHA LAW REVIEW

with little to no municipal community support from government sources. By contrast, the Nordic welfare states consider ECEC, LTC as universal entitlements and provide stable municipal funding for these services.[62] The comparison of the structural differences is stark *i.e.*, Nordic government institutions have included care in their fiscal framework and the design of social policy while in India, there are programmatic allocations to support care services that are dependent upon vulnerable appropriations from the annual budget.[63]

There is another constraint that involves leaving out architecture and financing design. One of the lengthiest statutory entitlements in India is twenty-six weeks of paid maternity leave provided by the statute. However, its financing model is largely dependent on employer liability, which may discourage the hiring of women who are capable of bearing children and reinforce the idea of maternity as a personal expense.[64] Feminized leave uptake and limited redistribution of care within households are being facilitated by the lack of a national, comprehensive paternity or gender-neutral parental leave system. This is particularly problematic. Parental leave funding in Nordic countries is primarily provided by social-insurance or tax-based pooling, with non-transferable use it or lose it quotas for fathers being established to standardize men's caregiving roles and distribute expenses across the community.[65] The present arrangements of India, including mother-only leave and employer funding, unintentionally reinforce gender norms and encourage a labor market prejudice.

A third barrier is restricted beyond the formal sector. With over 80% of the workforce in India working in the informal sector, many women have no access to benefits such as maternity income protection, child care, and contributory social insurance.[66] In contrast, self-employed and nonstandard workers are granted entitlements in Nordic systems through social-insurance frameworks or residence-based rights.[67] India's segmented labour market structure limits the universalization of care-related protections.

The presence of governance and legal gaps undermines integration. There is no uniform statutory framework in India that codifies entitlements across childcare, eldercare and disability care or respite services. Despite courts acknowledging the economic importance of unpaid domestic work in compensation and property cases, this legal framework has not been translated into applicable social rights.[68] However, despite lacking coordination across the legal

[62] OECD (n 49).
[63] Press Information Bureau (n 54).
[64] Code on Social Security 2020, s 60(3).
[65] ILO Convention No 156; ILO Convention No 183: ILO (n 1).
[66] World Bank (n 2).
[67] OECD (n 49).
[68] *Kirti* (n 38); *Arun Kumar Agrawal* (n 38).

INDRAPRASTHA LAW REVIEW

system, care-related schemes are dispersed across various ministries, including women and child development, health, labour, and social justice. Nordic welfare states integrate care obligations into their social-security, health regulations, and education laws, resulting in consistency. Care provision in India is hindered by fragmentation.[69]

The institutional flaws are exacerbated by deficiencies in data and measurement. Gendered unpaid work patterns were much more visible due to the NSO's 2019 and 2024 TUS, which showed glaring differences in daily time allocation. Periodicity is still restricted, though, and budgetary planning does not adequately incorporate disaggregated data on caste, area, and job status. In order to create feedback loops between policy design and quantifiable change, Nordic nations use comprehensive administrative and survey data to track fathers' leave uptake, ECEC enrollment, and labor-market outcomes. This recognition-to-reform continuity is disrupted by India's more dispersed data infrastructure.

Results are also influenced by labor market systems and social norms. According to survey data, Indian men provide comparatively less unpaid care than women, which reflects deeply ingrained patriarchal standards. Men who care for others have not yet been systematically targeted by policy. At the same time, the paid care industry in India, which includes domestic workers, Anganwadi workers, ASHAs, and home-based caregivers, is still mostly unregulated, underpaid, and informal. Many frontline employees do not have full social security coverage and are paid honoraria instead of pay. Nordic care industries are relatively formalized and connected into public employment systems, which reinforces service quality and political backing for further investment, despite some difficulties. Equity and efficacy are compromised by India's inability to professionalize caregiving.

A five-pillar framework serves to eliminate these obstacles through its system which includes Recognition, Reduction, Redistribution, Reward and Representation. The process of recognition needs institutions to perform scheduled time-use surveys while they should include unpaid care work in their satellite national accounts and require organizations to conduct care effect assessments during their gender-responsive budgeting activities. The process of reduction needs structured funding to build full-day crèches and ECEC centers which provide high-quality care and to establish local eldercare and disability services and build infrastructure. This supports water and sanitation and transportation and clean energy needs. The ILO highlights that care-sector funding produces multiple job creation effects while it enables women to spend their time on learning and working for money. The process of redistribution

[69] United Nations (n 6).

INDRAPRASTHA LAW REVIEW

requires organizations to move their employer-based leave payment system into a social insurance pool which distributes funds through small non-transferable paternity leave benefits and makes states accountable for providing statutory leave rights. The system needs formal work contracts for care staff together with guaranteed base pay and social security benefits and private provider oversight and official consultation channels for caregivers to participate in policy development.

The Indian government tries to provide specific policy options for implementation. The proposed Care Economy Framework Law would establish national minimum standards which states could use to develop their own systems. The government needs to implement a ten-year plan which would increase public care spending from its current level to 1-2 percent of GDP. The government needs to establish a system which combines employer contributions with social insurance funds to finance employee leave. Enhancing Anganwadi and ASHA positions through professional training will improve their labor rights and work output. The organization needs to use educational programs and media efforts and workplace benefits to create ongoing male participation in caregiving activities which will help organize institutional legal changes. There are important macroeconomic and developmental ramifications when care is incorporated into economic policy. Investing in childcare and elder care improves child development outcomes, increases female labor force participation, increases the effective labor supply, and strengthens social sustainability. Unpaid care obligations have been repeatedly noted by the World Bank as a significant barrier to women's work in India.[70] The Sustainable Development Goals, especially SDG 5 (Gender Equality), SDG 8 (Decent Work), and SDG 10 (Reduced Inequalities), are directly aligned with the integration of care into fiscal and legal architecture. The Nordic experience shows that care-centered regimes are systems that increase productivity rather than just expanding welfare. Incorporating the purple economy into macroeconomic planning would help India bridge the gap between normative recognition and structural implementation by transforming care from unseen home labor into recognized social infrastructure.

The legal system requires a complete evaluation of current statutory laws including the Code on Social Security 2020 and the associated labor laws which control workplace conditions and employee benefits in order to incorporate the care economy into India's policy structure. A legal system based on care needs to identify caregiving as an economic and social activity as it can establish the right to demand childcare, eldercare, and social security benefits. This

[70] National Statistical Office (n 3); World Bank (n 2).

INDRAPRASTHA LAW REVIEW

identification and associated actions would further highlight rights which can protect caregivers through the constitutional mandates. The transition from a scheme-based method to a rights-based one will boost accountability while decreasing implementation errors and will integrate care obligations into the entire welfare and labor law system.

A five-pillar framework that converts normative recognition into practical institutional design can be used to conceptualise the integration of the care economy into India's policy architecture:

Pillar	**What it Means in Practice**	**Key Policy Instruments**	**Transformative Outcome**
Recognition	Making unpaid and paid care work visible in economic and policy discourse	Regular time-use surveys, integration into satellite national accounts, gender-responsive budgeting	Care becomes visible as an economic contribution rather than invisible labour
Reduction	Reducing the time and physical burden of unpaid care work	Expansion of care services, improved water, sanitation, transport, and energy infrastructure	Women experience reduced time poverty and improved well-being
Redistribution	Sharing care responsibilities across households, state, and market	Paternity/parental leave, social-insurance models, employer-supported care services	More equal division of care work and increased female labour participation
Reward	Recognising care work as dignified, skilled labour	Formal wages, social security, training and certification for care workers	Improved livelihoods and professionalisation of the care sector
Representation	Giving care workers a voice in governance and policy-making	Worker collectives, unions, consultative policy bodies	Inclusive governance and accountability in care systems

VII. CONCLUSION AND SUGGESTIONS

It can be concluded that incorporating the care into Indian Economic Policy needs a total transformation. Care must be viewed as a duty not just of the family but also of the state, the

INDRAPRASTHA LAW REVIEW

performance of which is essential for inclusive economic growth. The existing legal and governance gaps create additional hurdles in achieving successful integration of care. The government runs multiple care programs which are sliced up among various ministries without any central legal system to manage them. Indian legal frameworks which govern women and family welfare still regard caregiving as a social welfare issue instead of recognizing it as an economic right which would empower workers through care-based reforms.

As highlighted in this study, women bear a disproportionate share of the expenses of care when it is invisible or underappreciated, including unpaid labor, time poverty, and limited participation in the labor market. The data examined shows as follows:

1. Unpaid care obligations are a significant structural barrier to women's right to decent work.
2. The effective labor supply increases and household incomes rise when the state makes investments in childcare, elder care, and disability services.
3. The systematic investments in care infrastructure improve macroeconomic resilience, strengthen human development outcomes, and increase FLFP.

Thus, care investment serves as both economic stimulus and social policy at the same time as care is the cornerstone of markets, nations, and societies rather than a secondary social issue. Social reproduction is necessary for economic production, and human talents must be maintained on a daily and generational basis for labor markets to function. Further, care infrastructure is labor-intensive, locally embedded, low-carbon, and in line with sustainable development imperatives, in contrast to capital-intensive industrial infrastructure. In this way, care infrastructure can be viewed as a type of green infrastructure, which is environmentally sustainable, socially beneficial, and economically viable. Therefore, acknowledging care within macroeconomic policy reframes gender equality as a structural economic imperative rather than a welfare add-on and redistributes economic opportunity.

This paper establishes a roadmap of five pillars for integrating the purple economy into the financial system and institutions of India.

- First, provide a full set of parental leave policies. India needs to change from the old-fashioned employer-liability for maternity leave to a system that pools moms and dads together through social insurance for maternity, paternity, and parental leave. This will definitely decrease discrimination against women in labour markets.
- Second, provide targeted subsidies for child and elder care. Subsidizing portions of ECEC, community-based services for elderly people, and services for disabled people that meet the needs of the families using the services remove costs from the families

INDRAPRASTHA LAW REVIEW

and will lessen the inequities that exist between different groups using these services. Creating a network of high quality, full day child care centers that meet the needs of both nutrition and early learning and support working parents will assist in meeting the challenge of providing safe, reliable, and affordable care during working hours.

- Thirdly, investments in care infrastructure are made by the public-private partnerships. Over the next ten years, a gradual increase in public spending on care would bring structural reform. However, the State responsibility may be supplemented, but not replaced, by public-private partnerships. To lessen time poverty, infrastructure planning, urban design, transportation, water, sanitation, and digital connectivity should include a care lens. Long-term sustainability depends on consistent municipal funding and statutory entitlements, as demonstrated by lessons from Nordic welfare states such as Sweden.
- Fourthly, the paid care workforce in India which includes Anganwadi workers ASHAs, domestic workers and eldercare providers needs official recognition as skilled workers. The establishment of structured training modules and certification pathways which provide social-security framework access will improve service delivery while enhancing worker's dignity.
- Lastly, the process requires two steps: first the development of service quality benchmarks and second the implementation of monitoring systems. The implementation of institutional changes requires the establishment of specific performance metrics which can be evaluated through testing. The implementation of regular time-use surveys together with the inclusion of care valuation in national accounts and the development of gender-responsive budgeting systems constitute essential elements to achieve this objective. The monitoring systems will evaluate ECEC coverage rates which include paternal leave uptake, labor market outcomes and service quality metrics. The establishment of transparent benchmarks permits organizations to maintain accountability while making data driven operational changes throughout their development.

India needs a comprehensive legal system which establishes essential care rights for all life stages. Courts have, many a time, acknowledged the economic value of unpaid domestic work generally for compensation and property matters, but this legal recognition has not developed into legally binding rights. The present study strongly supports the idea that unpaid care work must be acknowledged, reduced, and redistributed in order to promote inclusive and sustainable economic growth. Acknowledging care can change gender narratives and India can fully utilize

INDRAPRASTHA LAW REVIEW

its demographic potential. Instead of considering women as dependents on welfare systems, a care centered economic model recognizes them as economic contributors. Reducing and redistributing unpaid care and professionalising paid sector policies promote women's autonomy and strengthen intergenerational equity.

INDRAPRASTHA LAW REVIEW

EVALUATING THE EFFECTIVENESS OF CORPORATE INSOLVENCY LAWS IN INDIA: THE WAY FORWARD FOR VIKSIT BHARAT 2047

- Dr. Rohit Tiwari*

ABSTRACT

Corporate Insolvency laws under Insolvency and Bankruptcy Code, 2016 plays a crucial role in maintaining a robust corporate ecosystem by providing a structured mechanism for company to resolve financial distress, protect stakeholders so as to ensure economic and financial stability The present economic goal of India is to achieve the status of a developed nation by the year 2047, which will coincide with the centennial of the country's independence. 'Amrit Kaal' or 'Viksit Bharat 2047' is the name of this goal that was coined by Prime Minister Narendra Modi. Its objective is to transform India into a country that is self-reliance and developed.

The legislation governing corporate insolvency will play a significant role in the accomplishment of the objective of Viksit Bharat,2047 by promoting the establishment of a healthy corporate environment that encourages the rise of investments, economic stability, and confidence among the stakeholders. A robust corporate insolvency system is the foundation for economic resilience, investment development, financial stability, and job creation. These all are the vital components of the Viksit Bharat ,2047 initiative.

This article will include an analysis of the role that corporate insolvency laws play in the achievement of the Viksit Bharat 2047. The article further aims to analyse the significant challenges in implementation of resolution mechanism and suggest recommendations to enhance efficiency of corporate insolvency laws in order to contribute to the goal of Viksit Bharat 2047.

Keywords: Corporate Insolvency, Insolvency and Bankruptcy Code, Viksit Bharat, Corporate Insolvency Resolution process, Liquidation, Economy.

I. INTRODUCTION

Insolvency is a financial state where an individual, an entity, a partnership firm or a company does not have sufficient assets to meet its debts obligations. Such cases emerge due to poor asset management and inadequate cash flow for debt payment. A corporate insolvency exists when a company encounters difficulties performing its financial obligations and unable to pay its debts to its creditors. An entity operating in this state has liabilities exceeding its asset value or an insufficient cash flow stream to fulfil debt payments when they mature. The corporate Insolvency laws of India are established through the Insolvency and Bankruptcy code 2016.[1]

The Insolvency and Bankruptcy Code (IBC) emerged in India through 2016 to transform its outdated Insolvency and bankruptcy mechanisms. The insolvency resolution process in India operated under inefficient structures during the period before the IBC came into force while delays and multiple regulations created low recoveries for creditors together with system

* Assistant Professor of Law, Symbiosis Law School, Hyderabad , Symbiosis International University.

[1] J Singh and V Shriram, *Insolvency and Bankruptcy Code, 2016: Concepts and Procedure* (Bloomsbury 2017).

INDRAPRASTHA LAW REVIEW

mistrust.[2] The IBC combined multiple laws about corporate insolvency and bankruptcy to establish one comprehensive and time-specific system which both quickened the recovery of distressed assets and enhanced the business environment and fortified India's financial realm.

The Government of India has established its ambitious vision called *Viksit Bharat 2047* to develop a prosperous nation capable of reaching its 100-year anniversary of independence in 2047. The vision sets the goal to position India as a worldwide economic and social leadership while advancing technology and governance practices. The vision fits the present Indian reforms which include *Make in India* alongside *Digital India*, *Atma Nirbhar Bharat* and *green energy transitions* while creating an integrated and inclusive path of development. The route that leads to *Viksit Bharat 2047* will be successful if there is a concerted effort made by government institutions and business organisations, in conjunction with the people, to construct success that is both long-lasting and globally competitive.

The *Viksit Bharat 2047* program has the goal of transforming India into a developed economy by the year 2047. This goal is contingent upon India's strong economic performance, as well as the simplification of corporate procedures and the establishment of a robust financial system. In order to successfully complete this endeavour, it is essential to have the Insolvency and Bankruptcy Code (IBC) 2016, which is a statute that includes provisions for corporate insolvency.[3]

The following points enumerates the importance of corporate insolvency laws under IBC 2016 in contributing to the vision of *Viksit Bharat 2047* [4]:

- ***Boosting Economic Growth by Strengthening Business Environment***

  IBC 2016 includes time-limited procedures to handle corporate bankruptcy which is expected to safeguard economic efficiency from long-lasting impediments. Speedier financial resolution attracts domestic investors along with international ones to a better business atmosphere.

- ***Encouraging Entrepreneurship and Innovation***

  A well-running insolvency system lowers business failure concerns which motivates entrepreneurs to embark upon rational risks. The process helps startups and Micro Small

[2] L Nageswara Rao and AK Ravi, *Corporate Insolvency Resolution Process and Liquidation under the Insolvency and Bankruptcy Code, 2016* (LexisNexis 2023).

[3] L Thekkethil*, 'Revival of Corporates under Insolvency and Bankruptcy Code 2016' (2018) SSRN Electronic Journal.*

[4] Rao and Ravi (n 2).

INDRAPRASTHA LAW REVIEW

and Medium Enterprises (MSMEs) manage their financial challenges by enabling them to depart without extensive financial hardship which boosts the development of an entrepreneur-friendly environment.

- ***Enhancing Credit Availability and Financial Stability***

  The effectiveness of insolvency laws results in rapid loan recovery to motivate banks to extend credit for business purposes. The availability of credit for infrastructure projects startups and large-scale industries will increase and because of these developments it will support national economic development.

- ***Foreign Direct Investment (FDI) and Ease of Doing Business***

  A predictable and effective insolvency framework increases global investor confidence. India's rank in the Ease of Doing Business Index improved significantly after the implementation of IBC, making it an attractive investment destination. More FDI means better technology transfer, job creation, and infrastructure development which are the key pillars of Viksit Bharat.

- ***Strengthening the Banking and Financial System***

  Implementation of Insolvency and Bankruptcy Code enables banks to solve their non-performing assets thereby enabling them to generate available capital for additional loans. The strength of banking institutions enables the financing of large manufacturing projects as well as infrastructure development and technological advancements which India needs for its path to economic development.

II. LEGISLATIVE FRAMEWORK UNDER IBC 2016 CONCERNING CORPORATE INSOLVENCY

Before the Insolvency and Bankruptcy Code, 2016 (IBC) became a law, India had different legal frameworks to manage insolvency and bankruptcy cases separately for companies, individuals and partnerships. Different laws failed to unite coherently which resulted in inefficient process delays in resolving business problems. Previous to the implementation of the Insolvency and Bankruptcy Code several prominent laws managed bankruptcy and insolvency operations.[5]

The corporate insolvency laws defined in the Insolvency and Bankruptcy Code, 2016 (IBC) integrate a time-limited process for dealing with insolvency cases while seeking optimal value

[5] AAA Insolvency Professionals, 'Corporate Insolvency Resolution Process' (Insolvency and Bankruptcy, 20 December 2025) <https://insolvencyandbankruptcy.in/cirp> accessed 20 December 2025.

INDRAPRASTHA LAW REVIEW

outcomes for all interested parties. Under the IBC framework we will find a comprehensive set of rules which govern corporate insolvency resolution and the liquidation and resolution procedures. [6]

The Key Structural Components Are:

Institutional Framework

The Insolvency and Bankruptcy Code, 2016 (IBC) provides India with a comprehensive institutional structure which supervises insolvency and bankruptcy through establishment of regulatory bodies. A regulatory structure made of three components - regulatory bodies and adjudicatory authorities and supporting institutions which serves to implement corporate insolvency resolution and liquidation processes. The key institutions are also referred as the *four pillars* of the IBC 2016. These are *Insolvency and Bankruptcy Board of India (IBBI), Insolvency Professional (IP), Adjudicating Authorities (AA), Information Utility (IU).*[7]

The Insolvency and Bankruptcy Board of India functions as the main regulator which oversees all insolvency activities beneath the scope of the IBC. The IBBI was founded through the IBC to achieve organization, clarity, and streamlined procedures throughout bankruptcy and insolvency processes. The IBBI operates to both drive efficient operations throughout the insolvency system and protect the rights of creditors as well as debtors and other stakeholders. The IBC has built a step-by-step adjudication process for handling insolvency and bankruptcy matters. The established authorities perform legal supervision duties to settle conflicts before they validate resolution or liquidation schemes. The primary court for corporate insolvency cases is *NCLT*. The appellate authority for NCLT decisions is *National Company Law Appellate Tribunal (NCLAT)*. The Supreme Court of India stands as the last tribunal to resolve all disputes that occur under the IBC framework.[8]

The tasks of running insolvent company operations fall under the vital responsibility of *Insolvency Professionals* during insolvency management. These professionals fulfil functions as both *Interim Resolution Professionals (IRPs)* and *Resolution Professionals (RPs)* and Liquidators. The IP performs major functions during as prescribed under the IBC. These are,

[6] 'Decoding the Legislative Framework of the NCLT: Companies Act, 2013 & Insolvency and Bankruptcy Code, 2016' (Jus Corpus, 4 February 2025) <https://www.juscorpus.com/decoding-the-legislative-framework-of-the-nclt-companies-act-2013-insolvency-and-bankruptcy-code-2016> accessed 20 December 2025.

[7] Insolvency and Bankruptcy Board of India <https://ibbi.gov.in/en> accessed 1 April 2025.

[8] M Ayilyath, 'Roadblocks under Insolvency and Bankruptcy Code, 2016 -- Need for Capacity Building' (2019) SSRN Electronic Journal <doi:10.2139/ssrn.3440479>.

INDRAPRASTHA LAW REVIEW

taking control if the company going CIRP, collection and verification of claims, inviting resolution plans etc. [9]

The centralized *Information Utilities (IUs)* function as storage systems that handle financial and credit data about both businesses and individual subjects. Insolvency resolution functions faster and becomes more transparent through the actions of these Information Utilities.

Corporate Insolvency Resolution Process (CIRP)

CIRP represents an essential procedural framework of IBC 2016 which offers structured time-bound solutions for financially unstable companies. Corporate Insolvency Resolution Process exists to guarantee that unstable businesses will either bring back life through management changes or achieve liquidation through organized procedures. The goal of this process serves multiple functions including creditor protection and business stability maintenance and economic promotion and business practice facilitation in India.[10]

The *Corporate Insolvency Resolution Process (CIRP)* under the Insolvency and Bankruptcy Code, 2016 (IBC) can be initiated by the *Financial Creditors, Operational Creditors* and *Corporate Debtors.* The CIRP can be initiated only if the default amount is 1 crore or more.[11]

A financial creditor may start the Corporate Insolvency Resolution Process for corporate debtors who fail to pay financial debts above ₹1 crore in value. The list includes financial institutions together with banks and debenture holders alongside homebuyers who provided funds through loans to corporate debtors. The National Company Law Tribunal (NCLT) receives financial creditor applications through which they review evidence showing default cases by examining loan agreements and bank statements and Information Utility default records. A financial creditor has no requirement to issue a demand notice before submitting an application for CIRP. When NCLT gets an application, they need to decide within fourteen days about the occurrence of default. After evaluation the tribunal will authorize the admission of the case.[12]

An operational creditor possesses the power to start the Corporate Insolvency Resolution Process (CIRP) against corporate debtors with unpaid debts exceeding Rs 1 crore. To initiate CIRP under the Insolvency and Bankruptcy Code 2016, operational creditors need to issue

[9]Ministry of Corporate Affairs, 'E-book' <https://www.mca.gov.in/MinistryV2/insolvencyandbankruptcycode.html> accessed 3 April 2025.

[10] Umakanth Varottil and Rahul Sibal, 'Constitutional Conundrums Involving Corporate Insolvency in India' (2023) SSRN Electronic Journal <https://www.ssrn.com/abstract=4645174> accessed 16 April 2025.

[11] Insolvency and Bankruptcy Code 2016, s 4.

[12] Insolvency and Bankruptcy Code 2016, s 7.

INDRAPRASTHA LAW REVIEW

demand notices to corporate debtors who possess ten days to pay the debt or present disputes.[13] When required payment or dispute from the debtor is not received the operational creditor begins a process at the National Company Law Tribunal (NCLT) using documentation showing default and other evidence. The NCLT possesses a 14-day time limit to determine whether it will accept or dismiss the submitted application.[14]

A corporate debtor starts a Corporate Insolvency Resolution Process (CIRP) to find an organized resolution when debt repayment becomes impossible. Applications under a corporate insolvency resolution process need to contain financial statements in addition to default records and creditor information and a proposed resolution professional selected to handle the insolvency proceedings. The NCLT examines the application and accepts the case within 14 days after satisfying themselves.[15]

The National Company Law Tribunal (NCLT) admits the application relating to Corporate Insolvency Resolution Process (CIRP) which initiates a structured resolution process. The provision under the code states that once the Corporate Insolvency Resolution Process (CIRP) application is admitted by the National Company Law Tribunal (NCLT), the resolution process follows a structured and time-bound approach. The first step is the declaration of a moratorium under Section 14 of the Insolvency and Bankruptcy Code (IBC), 2016, which prohibits legal proceedings, asset transfers, and enforcement of security interests against the corporate debtor during CIRP. Simultaneously, the Interim Resolution Professional (IRP) is appointed to take control of the debtor's management, replacing the board of directors, and ensuring the company continues as a going concern. The IRP then makes a public announcement inviting creditors to submit their claims, which are verified to form the *Committee of Creditors (CoC)*—a body comprising only financial creditors who play a decisive role in the resolution process. The CoC, in its first meeting (held within 30 days of IRP's appointment), either confirms the IRP as the Resolution Professional (RP) or appoints a new RP to oversee the insolvency proceedings. The RP then prepares an *Information Memorandum (IM)* detailing the financial and operational status of the corporate debtor, based on which prospective resolution applicants (bidders, investors, or companies) submit resolution plans. These plans are evaluated and voted upon by the CoC, requiring at least 66% majority approval to be accepted. The approved plan is then submitted to the NCLT for final approval, leading to either the revival of the corporate debtor under new management or its liquidation if no viable resolution plan is found.

[13] Insolvency and Bankruptcy Code 2016, s 8.
[14] Insolvency and Bankruptcy Code 2016, s 9.
[15] Insolvency and Bankruptcy Code 2016, s 10.

INDRAPRASTHA LAW REVIEW

Liquidation

The liquidation process under the Insolvency and Bankruptcy Code (IBC), 2016 is initiated when the Corporate Insolvency Resolution Process (CIRP) fails due to either non-approval of a resolution plan within the prescribed 330-day timeline or a direct decision by the Committee of Creditors (CoC) to liquidate the corporate debtor. Once the National Company Law Tribunal (NCLT) passes a liquidation order under Section 33 of IBC, a liquidator (usually the existing Resolution Professional) is appointed to manage the liquidation proceedings.[16] The liquidator takes control of the company's assets, oversees their valuation, and prepares an asset liquidation plan. The liquidation estate is formed, and secured creditors are given the option to either enforce their security interests outside the liquidation process or participate in the asset distribution. [17]The liquidator then sells the corporate debtor's assets through public auctions or private sales, and the proceeds are distributed according to the waterfall mechanism outlined in Section 53 of IBC, which prioritizes insolvency resolution costs, secured creditors, workmen dues, unsecured creditors, government dues, and, lastly, shareholders[18].In the process of liquidation, the liquidator is also able to unwind fraudulent or undervalued transactions so as to recover assets to the creditors. After all the assets have been realized and the liabilities discharged, a final report is filed with the NCLT and the dissolution of the corporate debtor is ordered by the NCLT bringing the legal existence of the corporate debtor to an end. IBC liquidation process guarantees transparency, efficiency and a well-organized exit of financially inefficient businesses and recoveries maximum of creditors.[19]

III. CHALLENGES IN IMPLEMENTATION

Despite certain accomplishment of the code, there exist several challenges. The Insolvency and Bankruptcy Code (IBC), 2016, was introduced to promote ease of doing business, ensure timely resolution of financial distress, and strengthen India's economic stability. However, the challenges in its implementation pose significant threats to achieving the vision of Viksit Bharat 2047. These are:

[16]'The Liquidation Process' (ARITA) <https://arita.com.au/ARITA/ARITA/Insolvency/help/The-liquidation-process.aspx> accessed 28 December 2024.
[17]Internal Revenue Service, 'Chapter 7 Bankruptcy - Liquidation under the Bankruptcy Code' <https://www.irs.gov/businesses/small-businesses-self-employed/chapter-7-bankruptcy-liquidation-under-the-bankruptcy-code> accessed 28 December 2024.
[18]'About Liquidation or Winding Up' (Insolvency Office of Singapore) <https://io.mlaw.gov.sg/corporate-insolvency/about-liquidation-or-winding-up> accessed 28 December 2024.
[19] RK Singh, 'Insolvency, Liquidation, and Winding Up Law in India: An Urgent Need for Review' (2010) SSRN Electronic Journal.

INDRAPRASTHA LAW REVIEW

Delay in admission of the application

Under Section 7, Insolvency and Bankruptcy Code (IBC), 2016, the National Company Law Tribunal (NCLT) has only 14 days to admit or reject insolvency applications brought by financial creditors (under Section 7), operational creditors (under Section 9), or corporate debtors (under Section 10). Also, in case, an application is discovered to be defective, the applicant will have 7 days to correct the unacceptable errors and this is deemed as a binding requirement. But judicial ruling has determined that the 14 days requirement of NCLT is not binding but is guide line and therefore does not have to be taken as a deadline. Surendra *Trading Company* v. *Juggilal Kamlapat Jute Mills*, the Supreme Court. did clarify that the procedural deadlines ought not to overrule principles of justice, though exceptions should be made in extraordinary situations. Although the IBC is expected to promote a speedy resolution of insolvency, courts have found that absolute adherence to deadlines can undermine the principles of fairness, especially where delays are caused by the vagaries of the procedure or an influx of cases in the NCLT. Such interpretation balances between making the insolvency process time-bounded and keeping the discretion of the judiciary in order to schedule the process longer in justified cases. However, excessive delays continue to be a concern, and strict compliance with reasonable timeframes is essential to maintain the effectiveness of the insolvency regime in India. [20]

The number of days involved in delays concerning the admission of the CIRP application is not kept as a record with the NCLT or IBBI, therefore no published data is found by the researcher on the website of the IBBI. Different research conducted states different values which indicates on average 250 days of delay. [21]

Delay in Insolvency Resolution process

The main challenge under the IBC involves lengthy delays that occur during insolvency resolution processes. According to IBC provisions the resolution procedure originally ran for a maximum of 270 days by combining an initial 180-day period with an optional extension of 90 more days.[22] The length of insolvency proceedings became 330 days after authorities identified complex cases needing more reasonable completion timelines. The actual resolution duration developed into values that exceed all time limitations specified by statute. The actual duration

[20]India Filings, 'Stages of Corporate Insolvency Process' <https://www.indiafilings.com/learn/stages-of-corporate-insolvency-process> accessed 21 December 2024.

[21]'Overview of India's Insolvency and Bankruptcy Code' (Global Restructuring Review) <https://globalrestructuringreview.com/review/asia-pacific-restructuring-review/2023/article/overview-of-indias-insolvency-and-bankruptcy-code> accessed 23 December 2024.

[22] Varottil and Sibal (n 10).

INDRAPRASTHA LAW REVIEW

of insolvency cases extends beyond 582 days surpassing the initial estimated timeline. The elongated resolution period generates severe repercussions since it allows company resources to waste away over timed. Liquidation orders which are stated to act as final options take 499 days on average to complete. The protracted delay determines substantial decreases to asset worth which results in lower recovery rates for creditors and compromised financial performance of distressed businesses. [23]

The excessive delay hurts financial institutions and banks because it keeps their loans at risk while leaving them in financial uncertainty.[24] This problem opposes the principles of Viksit Bharat because it creates obstacles to the establishment of an economy that functions efficiently through fast decision-making and maintains financial stability. Financial system uncertainly rises due to extended insolvency resolutions that also stops asset recovery efforts and makes it difficult for companies to resume operations. Business continuity and competitiveness of a self-reliant economy depend strongly on shorter insolvency procedures.[25]

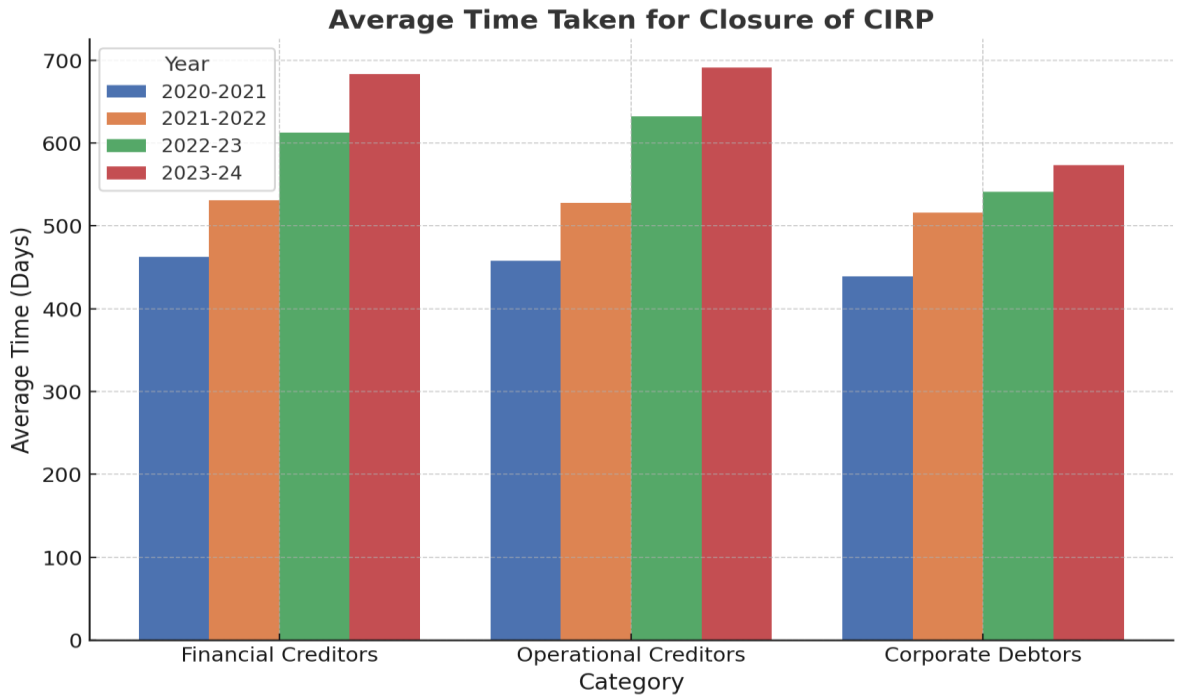

Figure 1: Average Time Taken for Closure of CIRP

[23]'Corporate Insolvency in India and Other Countries: A Comparative Study' <https://icsiip.indu/documents/Articles/Corporate%20Insolvency%20in%20India%20and%20Other%20Countries%20-%20A%20Comparative%20Study.pdf> accessed 24 December 2024.

[24] YN Mann and KN Mann, 'Corporate Insolvency Law in India' in *Advances in Finance, Accounting, and Economics* (IGI Global 2019) 74.

[25]Ministry of Corporate Affairs, 'Restructuring and Liquidation' <https://www.mca.gov.in/content/mca/global/en/data-and-reports/reports/other-reports/report-company-law/restructuring-and-liquidation.html> accessed 28 March 2024.

The graph illustrates the average time taken for the closure of the Corporate Insolvency Resolution Process (CIRP) across different creditor categories over four financial years (2020-2021 to 2023-2024). The categories include Financial Creditors, Operational Creditors, and Corporate Debtors. The data indicates a consistent increase in the time required for closure across all categories over the years.

- *Financial Creditors:* The average time taken has risen from 463 days in 2020-2021 to 683 days in 2023-2024, showing a steady increase in delays.
- Operational Creditors: The trend is similar, with closure time increasing from 458 days in 2020-2021 to 691 days in 2023-2024.
- *Corporate Debtors:* The closure time for this category started at 439 days in 2020-2021 and increased to 573 days in 2023-2024.

The increasing number of days indicates that the CIRP process has become more complex and inefficient. The continuous increase in distribution costs indicates that judicial delays and procedural bottlenecks continue to affect insolvency cases as well as the growing complexity of insolvency cases. An urgent need for process improvements through targeted reforms emerges because of the significant increase between 2021-2022 and 2023-2024.

Overburdened NCLT

Insolvency and Bankruptcy Code 2016 face significant obstacles to the successful execution of Corporate Insolvency Resolution Process through the National Company Law Tribunal and institutional disadvantages. The increasing number of cases has led to a backlog that will result in the long delays in the bankruptcy resolution process, which takes more than the normal 330 days. Such delays are mainly caused by the fact that NCLT lacks the presence of judicial and technical members, which contributes to premature adjournments and the ineffective handling of cases. The complexity of the processes and the disagreements between judges also results in many insolvency cases being in the admission stage. Institutional inefficiencies such as protracted liquidation process, value conflicts, and delays in approval by regulatory bodies make the system weaker. Lack of stakeholder co-ordination, such as resolution professionals (RP), the Committee of Creditors (CoC) and regulatory authorities contribute one more level of complexity to the process. The litigation [26]culture, where promoters and operational

[26] 'Gavel to the Block: An Overburdened NCLT is a Drag on the New Bankruptcy Code' (The Economic Times) <https://economictimes.indiatimes.com/prime/corporate-governance/gavel-to-the-block-an-overburdened-nclt-is-a-drag-on-the-new-bankruptcy-code/primearticleshow/67951567.cms> accessed 28 February 2024.

INDRAPRASTHA LAW REVIEW

creditors regularly contest CIRP processes, also contributes to needless NCLAT and Supreme Court appeals, which further delay final rulings.[27]

Inefficient operation of the system stems from insufficient digital infrastructure along with weak technology deployment together with the heavy reliance on physical hearings. These difficulties damage investor faith while opposing the main goal of the IBC to supply swift solutions for distressed business recovery. The improvement of NCLT benches alongside increased appointment of judicial members and technical staff along with advanced digital case management systems and AI-based tracking tools is required to solve current operational problems. The government needs to promote pre-packaged insolvency resolution and mediation approaches to lighten the workload of NCLT. The development of a well-functioning insolvency framework stands essential for India's goal of elevating doing business procedures and achieving the vision of *Viksit Bharat 2047* by establishing a resolved process that functions efficiently and transparently within established timeframes to back economic growth and financial stability.

Reduction in Realisation

Despite its positive impact on creditor recovery rates the high haircuts resulting in financial losses prove to be a substantial difficulty under the IBC framework. High haircuts damage the financial sustainability of resolution plans and scare away potential creditors from implementing the insolvency resolution process. Because the IBC resolution process takes too long while also having procedural issues it creates higher financial losses which makes the IBC less effective for corporate bankruptcies.[28]

Such financial losses need minimization in a self-reliant economy which India strives to achieve through *Viksit Bharat*. High haircuts show enough concern to undermine possible investor interest particularly for individuals who are unwilling to get involved in insolvency resolution because of potential big financial losses. Financial losses from high haircuts prompt investors to avoid the Indian market through selection of other opportunities or they abandon the market altogether. The decline in investments due to high haircuts creates obstacles for ease of doing business in India thereby retarding progress toward the *Viksit Bharat* vision.[29]

---

[27]'NCLT - Understanding National Company Law Tribunal and its Power' (Clear Tax) <https://cleartax.in/s/national-company-law-tribunal> accessed 28 January 2024.

[28]PC Bureau, 'IBC: Huge Haircuts, Low Recovery Spoil the Code's Report Card' (Policy Circle, 2024) <https://www.policycircle.org/policy/changes-needed-in-ibc> accessed 28 January 2024.

[29]'IBC Haircuts Report Card 2014-24' <https://www.fanindia.net/wp-content/uploads/2024/03/IBC-Haircuts-Report-Card-2014-24.pdf> accessed 22 March 2024.

INDRAPRASTHA LAW REVIEW

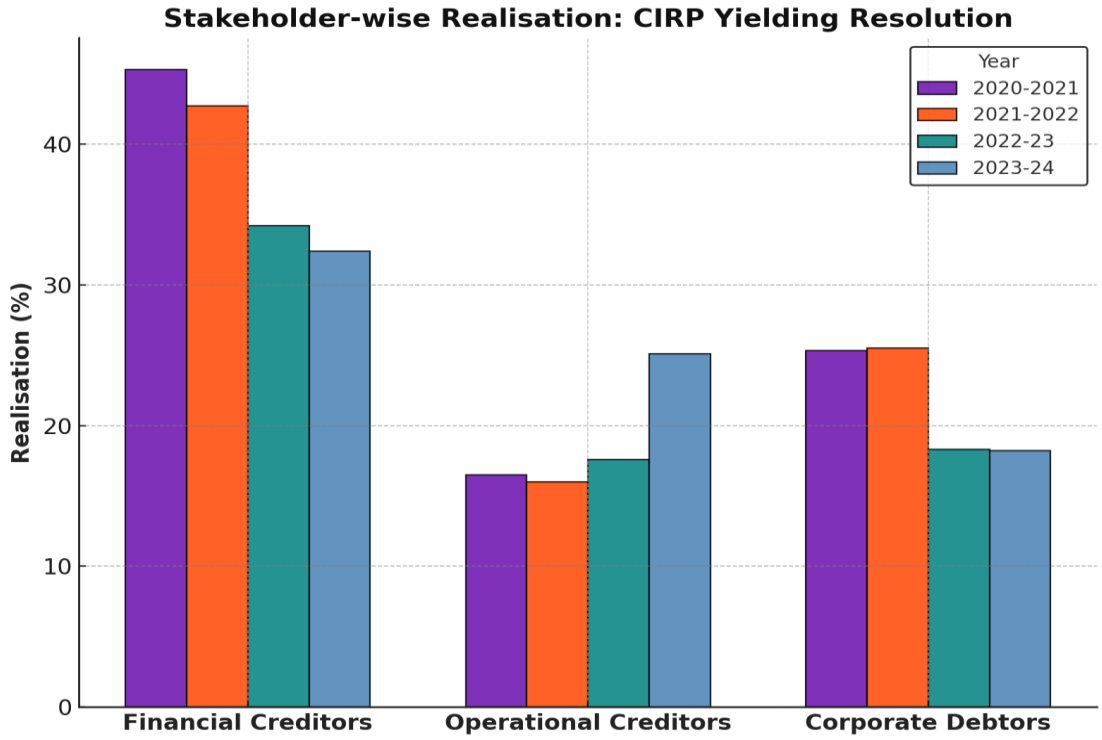

Figure 2: Stakeholder-wise Realisation: CIRP Yielding Resolution

A graphical presentation shows the Corporate Insolvency Resolution Process (CIRP) stakeholder realization during the financial periods starting from 2020-2021 through 2023-2024. The data differentiates how much Financial Creditors and Operational Creditors and Corporate Debtors recovered through the Corporate Insolvency Resolution Process.

The Realisation of Financial Creditors has been steadily decreasing over the years. In the year 2020-2021, it reached its highest point of 45.3%, but by the year 2023-2024, it had decreased to 32.4%. The above data shows a fall in recoveries when it comes to financial creditors.

In the initial years, the realisation it terms of operational creditors was on the low side between 16% to 17.6% from 2020 to 2023. However, in 2023-2024 it was a rather impressive improvement with a 25.1 per cent recovery rate; this might indicate that recent actions or changes to insolvency legislation have had a beneficial impact on their recovery rates.

The realisation percentage for corporate debtors remained almost stable during the years 2020 and 2022, placed somewhere between 25.3% and 25.5% of the total amount owed. Nevertheless, over the years 2022-2023 and 2023-2024, it decreased to 18.3%-18.2%, which is an indication that corporate entities are maintaining lower values during the resolution process.

Addressing the underlying reasons of inefficiencies in the insolvency process can help to lower the frequency and severity of haircuts, hence helping to solve these problems. Strengthening the IBC system, promoting early resolution and lowering procedural delays might assist

INDRAPRASTHA LAW REVIEW

enhance the financial results for creditors and increase investor confidence. A more predictable and less financially punishing insolvency resolution procedure would help India to be a more appealing place for investment and promote a more self-sufficient and strong economy.

Issues faced by the Resolution applicants

The resolution applicants are the true saviours of the Code. They are absolutely necessary unit of this process. They provide the money and the means to remove the NPA accounts from the books. They offer the framework enabling the Code's main goal, i.e. "reviving sick companies," to be accomplished. However, the resolution applicants are also susceptible to the many obstacles now. The challenges of Resolution applicants start with their presentation before the CoC, where they are interrogated and not welcomed as they should be. Any possible acquirer of a company would ask that it take over the debtor free from all encumbrances and charges and would pray for waivers of past contingent obligations and liabilities as a totally reasonable need. But, in most cases, the same has been rejected by the creditors and National Company Law Tribunal.[30]

Lack of sufficient backing for MSME

The economic foundation of India depends on MSMEs because they create employment opportunities and push forward economic development. Under the IBC framework the MSMEs encounter special obstacles in their pursuit of access to and successful navigation through the insolvency procedures. The substantial expenses involved in IBC proceedings including court fees and administrative costs create a barrier that stands in the way of MSMEs to pursue formal bankruptcy proceedings due to their financial constraints. The inability to tackle financial obstacles effectively forces numerous MSMEs to shut down their operations and end job opportunities.

In order to address this problem, the pre-packaged insolvency resolution process (PPIRP) was enacted with the intention of reducing the complexity and cost of the insolvency process for micro, small, and medium-sized enterprises (MSMEs). Despite this, the PPIRP has not been functioning to its full potential, mostly because of the complicated procedures involved, the low level of awareness among MSMEs, and the lack of clarity on the benefits it offers. There

[30]'India Code Section Details' <https://www.indiacode.nic.in/show-data?actid=AC%CEN%2F11%2F%0A0055%2F2016%2F15117807328273&orderno=35> accessed 24 February 2024.

INDRAPRASTHA LAW REVIEW

are a lot of micro, small, and medium-sized enterprises (MSMEs) that continue to struggle with the traditional IBC procedure, which frequently results in liquidation rather than reorganisation. To ensure the Viksit Bharat plan is successful, micro, small, and medium-sized enterprises (MSMEs) should be empowered. There is need to streamline and improve the provisions of IBC among micro, small, and medium-scale enterprises (MSMEs) to accord these organisations with the resources they need in order to overcome the effects of financial hardship. India can ensure that its small businesses remain resolute, out of the misery and keep on contributing to the economy by raising awareness on the PIRP, streamline the process and providing financial incentives to micro, small and medium-sized enterprises (MSMEs) that have been undergoing corporate restructuring. Such assistance to micro, small and medium-sized enterprises (MSMEs) would also contribute to the further enhancement of the financial ecosystem, which will lead to a more resilient and autonomous economy.

IV. RECOMMENDATIONS

These recommendations are made with an aim to make IBC more effective while aligning with the vision of *Viksit Bharat 2047*. These recommendations will help to build a more resilient and self-reliant economy by enhancing the resolution mechanism, improving recovery rates, and reducing delays.

Simplifying the CIRP

In order for the Corporate Insolvency Resolution Process (CIRP) under the Insolvency and Bankruptcy Code (IBC) 2016 to be effective, it should be refined to address problems like protracted litigation, unreasoned delays, and degradation of asset value. This would help to the preservation of asset value, and draw serious investors.

An efficient CIRP would also improve the rate of recovery of creditors and lessen high rates of loan write-offs which scare most financial institutions away lending. Further facilitation of active engagement of resolution applicants in the process would be done by reducing compliance requirements and administrative barriers. Moreover, procedural clarity and alternative dispute resolution systems would be useful as they would decrease unnecessary litigation, and some of the workload on the stretched National Company Law Tribunal (NCLT). Making the organized structures like Pre-Packaged Insolvency Resolution Process (PPIRP) leaner would also decrease the cost and make it more affordable especially to small businesses and to the micro, small and medium enterprises (MSMEs). These reforms should promote the financial ecosystem and bring about sustainable economic growth because the mechanism of insolvency resolution should be a more effective and inclusive process.

INDRAPRASTHA LAW REVIEW

Judicial Delays reduction

Delay in courts is one of the biggest hindrances in the Insolvency and Bankruptcy Code (IBC), 2016. Constant litigation, no end of appeals and overworked courts causes insolvency proceedings to fall back and stall the efficiency of IBC. The bottlenecks in the judiciary have become the keys and the hearing of resolutions plans and approvals on the NCLT and NCLAT has stalled cases long over the 330 days deadline prescribed by the IBC. This is even worsened when other regulatory authorities such as SEBI, the Supreme Court and the High Courts enter the insolvency issues resulting to legal uncertainties. Consequently, the insolvency cases take years before they can be resolved, which influences the business recovery and confidence of the creditors. In order to address such delays, the expansion of NCLT and NCLAT is urgently needed; this requires the establishment of more benches and the appointment of more judges. The process can also be made more efficient with the help of leveraging technology, including AI-based legal research, automated case trackers, and e-filing systems. Also, implementing tougher deadlines and punishments of delay strategy will serve to guarantee that the insolvency process proceeds without an unwarranted adverse obstacle.

Addressing these judicial delays is key to strengthening the IBC and building a more effective insolvency system. A faster and more predictable resolution process will not only support struggling businesses but also contribute to India's broader vision of *Viksit Bharat 2047*.

Improving the realisation amount by the stakeholders

The Insolvency and Bankruptcy Code (IBC), 2016 requires increased realization amounts from stakeholders to achieve the best outcomes for creditors and other participants and investors. Delays in the insolvency process led to asset depreciation and lower recovery values. The CIRP timelines combined with fast NCLT/NCLAT hearings along with less judicial involvement will sustain asset value to deliver better recovery outcomes for all stakeholders. The process becomes more effective when more resolution applicants become involved through an open and widely advertised bidding procedure which increases competitive offer prices.

Increasing the involvement of strategic buyers, private equity companies, and international investors can help to improve valuation of distressed assets. Usually, a company's assets provide more value when sold as a continuing concern than under asset-wise liquidation. Strengthening systems supporting business continuity during CIRP helps companies keep operational value, hence improving realisation. Promoting Stressed Asset Funds (SAFs) and Asset Reconstruction Companies (ARCs) to take part in CIRP might offer improved valuation and more money for struggling companies. Rather than pushing liquidation, these organisations

INDRAPRASTHA LAW REVIEW

may assist firms recover and reorganise. Artificial intelligence-driven predictive analytics, digital asset valuation models, and blockchain-based transaction monitoring can increase asset value accuracy and recovery results. A real-time database of distressed assets guarantees enhanced investor attraction.

Improve CIRP access for MSMEs

To survive and develop, the Indian MSMEs require convenient access to efficient insolvency systems that guarantee business continuity, which, in the end, will lead to the development of the national economy and independence. Pre-Packaged Insolvency Resolution Process (PIRP) should be made more available, since it is a more cost-effective and faster option to a small business that is in financial distress. It would be more feasible to expand PIRP with streamlined procedures which are specifically designed to suit MSMEs in order to sail through the insolvency with minimal expenditure on the expensive, cumbersome, and lengthy legal mechanisms. The government must as well intervene through provision of financial aid, including tax breaks and subsidies to assist the MSMEs to reorganize and escape bankruptcy. This would provide financial gains which will allow small businesses to resume and sustain their operations saving jobs and maintaining their contribution to the economy. Such support is also vital to the long-term success of MSMEs, the very core of the *Viksit Bharat 2047* vision.

Strengthening the Role of Resolution Professionals

Another important activity in the Insolvency and Bankruptcy Code (IBC), 2016, is Resolution Professionals (RP). They become the linking point between creditors and the business in distress, making sure that the insolvent cases can be handled fairly, openly and promptly. Yet, their efficiency is usually impaired by such obstacles as inadequate experience, possible conflict of interest, and regulatory loopholes.

In order to solve such problems, a number of reforms are required. Given the fact that most insolvency cases usually demand a multidisciplinary approach, capacity-building programs to prepare RPs with specialized knowledge in the areas of finance, law, and management should be enhanced. On top of that, even more strict ethical rules and regulations should be implemented in order to avoid misconduct, including collusion with promoters or preference to some creditors. Accountability and adherence to professional standards A stronger monitoring framework, with frequent audits by the Insolvency and Bankruptcy Board of India (IBBI), would make RPs more accountable.

RPs should also be compensated and other resources should be supported at all costs since in most cases they cannot work effectively due to lack of finance. Efficiency could also be

INDRAPRASTHA LAW REVIEW

enhanced drastically by making use of AI-driven analytics in making superior decisions. With such measures, RPs may be allowed to perform their functions more efficiently and efficiently, to enable the process of insolvency resolution to be successful and smooth, a process that will enhance the overall system of the IBC.

V. CONCLUSION

The Insolvency and Bankruptcy Code (IBC) of India has brought a change in the sphere of financial reforms in the country. It has changed the way corporate debt and non-performing assets have been resolved bringing to it structure, transparency, and time constraints. By solving the flaws of the earlier insolvency laws, the IBC has not only stabilized financial markets but also enhanced creditor confidence which has made India a more viable destination by both domestic and international investors. Although these achievements have received widespread acclaim over the IBC, the organization is not without its challenges that keep it off the path of achieving its potential. Delay in case resolutions is one of the greatest issues and most proceedings have gone way beyond their scheduled time.

Creditors are also exposed to high haircuts, and they become less able to recover their finances and lose interest in investing. These delays are increased by the already overstretched National Company Law Tribunal (NCLT) and scarcity of judicial staff which further slows down the resolution process. The result of this inefficiency is depreciation of assets, which impacts on creditor returns, as well as the financial wellbeing of businesses. India must transform IBC into a more effective and smooth system so that the vision of *Viksit Bharat 2047* can be achieved.

The special emphasis must be put on the support of the micro, small, and medium-sized enterprises (MSME), which is the core of the Indian economy. These companies require readily available and efficient insolvency resolutions to overcome the financial downturn and proceed to expand. India can make the IBC a driver of economic development by increasing the capacity of the judiciary, streamlining the resolution processes, increasing creditor recovery rates, and supporting MSMEs. To solve the existing challenges not only will assist struggling businesses but it will also make India a stronger self-reliant global economic leader.

INDRAPRASTHA LAW REVIEW

KAMIKAZE DRONES: ETHICAL IMPLICATIONS OF LETHAL AUTONOMOUS WEAPONS SYSTEM

- Appoorva Dangi*
- Anuj Kumar Vaksha**

ABSTRACT

Loitering Munitions or Kamikaze Drones are a latter-day representation of Lethal Autonomous Weapons (LAWS) that play an imminent part in reshaping the ethical landscape of modern warfare. The present article aims at analysing the evolution of the Kamikaze drones and how they have inevitably become a part of present warfare scenario. As the advancements in the artificial intelligence and machine learning enhance their autonomy, concerns intensify regarding the extent to which human judgement impacts the humanity. The blurred line between surveillance and direct engagement raises profound legal and moral questions. The use of just modern-day warfare also raises questions about compliance with the core principles of International Humanitarian law Hence the paper examines ethical implications of deploying kamikaze drones within the broader framework of LAWS. The paper also explores the psychological and strategic dimensions of the suicide drones and delineates the asymmetry introduced by the LAWS that could exacerbate the global inequalities, as technologically advanced states gain disproportionate advantages over less equipped actors. By critically analysing the issues, the paper argues for urgent need to establish ethical guidelines and regulatory framework governing the development and deployment of kamikaze drones. It concludes that which such systems may offer tactical efficiency, their unregulated use risks undermining established norms of warfare and poses significant challenges to global peace and security.

Nowhere is the line blurrier than with Kamikaze drones - once seen as mere weapons, now walking the edge of autonomy. A close look unfolds here, linking how these machines changed warfare, what rules might apply when they strike, who suffers most in their shadow, while quietly reshaping risks across borders. It has been rightly observed that in the past two decades a novel class of weaponry have trajected from the margins of experimental programmes and insurgent improvisation into the core battleground: namely 'kamikaze drones' or 'suicide drones', which is descriptively a small unmanned aerial vehicle (UAV) which is potent of carrying an explosive payload intended at detonating on impact with a target[1].Despite being termed 'loitering munitions', such drones occupy an ambiguous space - neither fully missile nor purely remote-controlled craft. Their growing use prompts discussion across defence circles, ethical forums, academic law groups, and aid-focused bodies due to dual traits: affordable accuracy in attacks on one hand, difficult dilemmas in weapon regulation on the

* Research Scholar, USLLS, GGS IP University.
** Professor, USLLS, GGS IP University.

[1]J Garamone, 'Unmanned Aerial Vehicles Proving Their Worth Over Afghanistan' (American Forces Press Service, 16 April 2002) <http://archive.defense.gov/news/newsarticle.aspx?id=44165> accessed 20 June 2017.

INDRAPRASTHA LAW REVIEW

other. Questions arise not only about battlefield norms, yet spill into safety of non-combat zones and how quickly hostilities might intensify. While exact costs differ, consistency lies in their ability to hover before striking - a feature complicating both international rules and risk assessment practices. Some view them as tactical tools; others see pathways toward unstable conflict patterns emerging silently beneath surface-level efficiency[2]. This study examines reasons behind deploying suicide drones targeting military personnel alongside non-combatants. With pace intensifying, concerns emerge that extend past immediate combat strategies. Understanding unfolds regarding limits of international legal frameworks when applied to drone integration. Ethical benchmarks guiding creation and fielding slowly come into focus through analysis.

I. WHAT IS A SUICIDE DRONE AND ITS HISTORICAL TRAJECTORY

So, what exactly is a suicide drone? Basically, it's an unmanned weapon also called a loitering munition that hangs out in the air, hunts for a target, and then dives right into it, exploding on impact. They're cheap, surprisingly precise, and pretty flexible, which is why everyone seems to be using them more and more these days.

From quiet observation tools, these devices shifted purpose. Now central to global friction points - Russia versus Ukraine, Israel facing Hamas, unrest near the Red Sea - they evolved beyond mere watching. Explosives came later. So did intricate sensing gear. What began as eyes in the sky turned into something heavier. Progress here was not linear. Moments of change arrived quietly, then reshaped everything. More than mere airborne observers, these systems redefine combat through evolved engagement strategies. Built with integrated detonation capabilities, their sensors adapt rapidly during missions. Emphasis belongs here: any lethal drone qualifies as an armed unmanned craft, yet not every unmanned craft becomes a one-way strike platform. A shift in warfare emerges when function dictates form, rather than size or speed alone. Distinctions matter most where intent alters identity within military classifications. What counts is whether destruction forms part of its design from launch. Some fly to return data; others exist solely to impact and cease functioning immediately after.

The peruse of targeted drones significantly rose when the American agencies launched perforated attacks on Pakistan, Yemen and Somalia post 2000[3]. Yemen was targeted first in the

[2] M Benjamin, *Drone Warfare: Killing by Remote Control* (Verso 2013) 15.

[3]US Department of Justice, 'Lawfulness of a Lethal Operation Directed Against a US Citizen Who Is a Senior Operational Leader of al-Qa'ida or an Associated Force' (2011) 1 <http://msnbcmedia.msn.com/i/msnbc/sections/news/020413_DOJ_White_Paper.pdf> accessed 20 June 2017; see also n 13 below.

INDRAPRASTHA LAW REVIEW

year 2002 where a laser guided missile was targeted from an indigenous drone killing 6 people and destructing a car which included a suspect of Al- Qaeda lieutenant[4]. Later in 2010, Pakistan was the targeted similarly[5]. According to the US these drone attacks were carried out in pursuant of the attack in 2001 and were listed under the garb of self-defence, the US agencies also claimed that there were in line with the idea of 'necessity and proportion'. Subsequently in the post 2010 and early 2020's the kamikaze drones were inducted for a regular trial against the no -state actors in material conflicts and they were ameliorated for the research labs to a limited spesh operations arsenals[6]. Their usage and induction in the security and defence have been hugely diverse to various fields including military hardware, airfields and energy infrastructure[7] and their affordability and ease of peruse has helped them to stage at a pedestal as being lucrative both for precision tactical strikes and asymmetric attacks. Presently many nations possess drones and several are developing them. Naming a few like Iraq, Isreal, United Kingdom, Nigeria have claimed to manufacture their own set of armed drones and there have been claims that this technology is consumed more by the non-state actors[8]. The technology has over time upgraded with the convergence of inexpensive sensors, onboarding of lightweight explosives, dynamic manufacturing and commercial drone components that enable a wide array of actors to field loitering munitions at relatively minimal cost.

The kamikaze drones inherit specific roles and their valued battlefield effects are one of the most rated for tactical dynamics and have burgeoned in 'precision' in hitting the targets. They can be guided in their terminal and can incorporate optical sensors[9]. The second tactical aspect is extended observation to strike at the chosen moment which invariably offers a more tactical flexibility. The third tactical feature that it operates in saturation and attribution as low cost makes it possible to deploy the same in waves, forcing defenders to expand expensive interceptors or to accept some losses. However, these 'loitering munitions 'doesn't mean they

[4]E Schmitt, 'Threats and Responses: The Battlefield; US Would Use Drones to Attack Iraqi Targets' New York Times (5 November 2002) < www.nytimes.com/2002/11/06/world/threats-responses-battlefield-us-would-use-drones-attack-iraqi-targetshtml?scp=1&sq=drones&st=nyt> accessed 20 June 2017.

[5] KJ Heller and JC Dehn, 'Debate: Targeted Killing: The Case of Anwar Al-Aulaqi' (2011) 159 University of Pennsylvania Law Review PENNumbra, 175, 183.

[6] M Hastings, 'The Rise of Killer Drones: How America Goes to War in Secret' *Rolling Stone* (16 April 2012) <www.rollingstone.com/politics/news/the-rise-of-the-killer-drones-how-america-goes-to-war-in-secret-20120416> accessed 20 June 2017.

[7]UNSC Res 2216 (14 April 2015) UN Doc S/RES/2216.

[8] Israel's use of drones is kept entirely secret by the government and, as such, it has been impossible to produce data as to the extent of Israel's drone programme. Nonetheless, due to the fact that Israel does use drones for the delivery of lethal weapons, it has been included in this table. M Dobbing and C Cole, 'Israel and the Drone Wars' (2014) Drone Wars UK, <https://dronewarsuk.files.wordpress.com/2014/01/israel- and-the-drone-wars>pdf accessed 11 July 2017.

[9] MN Schmitt, 'Drone Attacks under the Jus ad Bellum and Jus in Bello: Clearing the "Fog of Law"' (2010) 13 Yearbook of International Humanitarian Law 311, 315.

INDRAPRASTHA LAW REVIEW

are a universal game changer they also posses' certain limitations which pose a difficulty in their usage. These limitations include payload, range, survivability against modern air defence and effectiveness against weather conditions.

The Russia-Ukraine war really put loitering munitions in the spotlight. Both sides used custom-built systems and improvised kamikaze drones, hitting everything from supply hubs and airfields to vehicles and key infrastructure. There were plenty of reports about imported models and cheap, long-endurance drones some from third-party suppliers, others just modified commercial gear showing up in all sorts of attacks.

Watching the conflict, two things stand out. First, loitering munitions work. Keep using these drones and you'll start to see real trouble for logistics supply lines get cut off, and even heavily guarded spots behind the front lines aren't safe. But that's not the end of it.[10]

II. ETHICAL AND LEGAL DIMENSIONS WITH USAGE OF AI GUIDED KAMIKAZE DRONES UNDER INTERNATIONAL HUMANITARIAN LAW

At stake in debates over kamikaze drones lies the issue of meaningful human control. Autonomy shapes these conversations, yet so do principles like distinction. Accountability matters just as much, even if it often gets less attention. The broader rules governing when force can be used - jus ad bellum - influence how such weapons are viewed. One concern stands out: who decides when a drone strikes. Not every factor carries equal weight, but together they shape legal and moral judgment. Fears grow about machines deciding to take lives independently, as suicide drones improve at detecting and striking targets without help. Though designed for precision, these systems blur the line between guidance and autonomy. With each upgrade, less human input is needed before impact occurs. Some question whether judgment should ever rest solely in algorithms analysing terrain and motion. As capabilities advance, so does unease over fully automated kill decisions. Machines acting alone in life-or-death moments remains a concern rooted in current progress. Nowhere has the issue become more visible than in current conflicts, where semi-autonomous drones were used amid electronic warfare in Ukraine - not just sparking debate, but also highlighting concerns over how fast decisions are made when machines assist. Even so, experiences from Gaza show another layer: reliance on algorithmic targeting stirs unease, especially where civilians mix closely with combatants, making oversight harder under pressure.

[10] 'How Kamikaze Drones Were Used by Russia and Ukraine' (BBC, 23 December 2023) <https://www.bbc.com/news/world-62225830>.

INDRAPRASTHA LAW REVIEW

Still key within the Geneva Conventions and Additional Protocol I - alongside autonomy - are distinction and proportionality. Though kamikaze drones may seem accurate in theory, their actual performance tends to falter due to sensor failures, fatigue among operators, interference with GPS signals, or dense city environments. Despite design claims, field conditions regularly undermine exact targeting. Clearly seen in Houthi drone strikes across the Red Sea - often linked to backing from Iran - and mirrored in Ukraine, where foreign-supplied weapons, once altered, blur lines of operational accountability. Where these issues meet lies a core challenge: jus ad bellum principles, although distinct from Article 2(4), which bans force, yet separate from how Article 51 justifications emerge, as shown in actions by the United States, Israel, and Iran. Legal questions persist even when host nations agree to military presence, especially after civilians are hurt, underlining complex moral and judicial dilemmas tied to armed drones designed for one-time use.

These ethics mainly revolve around decision-making, accountability, distinction and proportionality, and the risk of lowered thresholds for use[11]. One of the most perturbing and unsettling concern is of autonomy and human control concerning the humanitarian law. A core ethical concern revolving around their working shows concern as to how much autonomy such systems should have. If machines gain complete power to choose and attack targets, ethical concerns arise - alongside clashes with current and suggested rules on such weapons. Human oversight in life-or-death choices remains a central demand across global discussions. The International humanitarian law pledges that there is a distinction between military targets and civilians and that the anticipated military advantage from an attack is in proportion to a legitimate and potential civil harm. An expendable munition that can be steered and accurately targeted can, in principle, comply better with these obligations than unguided explosive devices. But in practice, the use of low-quality sensors, operators under stress, or attacks in dense urban areas increases the risk of civilian harm. Another disquiet is accountability and attribution as loitering munitions possess a complicated responsibility that is when a weapon is purchased, newly modified and used by proxies, tracing its culpability becomes a difficult notion. Their accountability with respect to usage by non- state actors is bleak and obedience as to their usage also comes under a scanner. And lastly the concern of low threshold to use force against another i.e. the relative affordability of loitering munitions risks making lethal force more routinized. Some analysts worry that easy access to precision strike tools could

[11]C Heyns, D Akande, L Hill-Cawthorne and T Chengeta, 'The International Law Framework Regulating the Use of Armed Drones' (2016) 65(4) ICLQ 791, 795.

INDRAPRASTHA LAW REVIEW

incentivize more frequent or riskier uses of force, particularly by actors who previously lacked reliable strike capabilities.

The above-mentioned issues provide us with impetus issues that should be under the scanner considering the repercussions of deployment of suicide drones under the International Humanitarian Law which prevails during an armed conflict from a bird's eye view.

It is an axiom that the International Humanitarian Law, which is a set of rules that seek to limit the effects of an armed conflict for humanitarian concerns is significant for interpretation of rights under International Human Rights Law as it differs from its application during peacetime. The cumulation and coordination of both can be identified under the concept of *Lex Specialis* which implies mutual application in derogation. Hence during an armed conflict, application of International Humanitarian law prevails.

The international armed conflicts are stabilised by the regulations under the customary law, Geneva Convention,1949[12] and its Additional protocol ,1977[13]. Where as in case of non-international armed conflict, i.e armed violence between an organised armed group within a state and the government agencies is governed by Additional Protocol II of Geneva Convention,1949 which requisites a non-state armed group shall operate under a responsible command and exercise control over the territory as to enable them to carry out sustained and concerted military operations and to implement the protocol[14]. Consequently, to carry out a drone strike against an organised armed group, the dispute shall be sufficiently intense. This is what United States claimed while defending itself for using the air-drone strikes against Al-Qaeda and Taliban in reverence to the 2001 twin tower attack. Majority of the drone strikes so far have been against the non-state actors but it has been claimed that a non-international armed conflict shall remain non-international even if over the international border but the dispute shall remain between a state and a non-state. One of the examples is intervention of Saudi Arabia between Yemeni government and Houthi rebellion. Houthi forces operating from Yemen used an array of aerial and maritime drones in attacks against ground targets in Saudi Arabia and

[12] Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (adopted 12 August 1949, entered into force 21 October 1950) 75 UNTS 31 ('Geneva Convention I'), art 63.

[13] Protocol Additional to the Geneva Conventions of 12 August 1949 Relating to the Protection of Victims of International Armed Conflicts (adopted 8 June 1977, entered into force 7 December 1978) 1125 UNTS 3 ('Additional Protocol I'), art 1(2); Protocol Additional to the Geneva Conventions of 12 August 1949 Relating to the Protection of Victims of Non-International Armed Conflicts (adopted 8 June 1977, entered into force 7 December 1978) 1125 UNTS 609 ('Additional Protocol II'), preamble.

[14] On the shift in perception of IHL from a protective body of law to one that is permissive, see D Kretzmer, 'Rethinking the Application of IHL in Non-International Armed Conflicts' (2009) 42 Israel Law Review 8, 23-31.

INDRAPRASTHA LAW REVIEW

maritime targets in the Red Sea and Bab al-Mandeb[15]. Some of these systems behaved as one-way attack platforms, targeting vessels, oil-related infrastructure, and onshore facilities. These operations demonstrated how irregular forces can apply loitering/strike concepts to sea and land targets, producing strategic and commercial disruption beyond purely military effects.

Although use of force by an accepting third party to a non-state armed group will not render the conflict international as here the dispute is not between two states directly[16]. A number of international judicial decisions have stated that the conflict situations are transnational or mixed containing both international and national issue hence government consent to intervention of third state play a very significant role.

United nations have been very stringent with the implementation of the UN charter and Article 2(4) of the same prohibits the threat or use of force against the territorial integrity of another state. The usage of drones to cause destruction in intrusion of Article 2(4), however under certain conditions the use of forces becomes perennial. This can happen under two significant scenarios, firstly, with the consent of territorial state and secondly to exercise the doctrine of self-defence. The states resorting to use of force is known as Jus ad bellum which has imperatively become a ruling guide with respect to deployment of drones.

In case of the consent of the territorial state, Article 20 of International Law Commission on state responsibility can be highlighted. This Article encircles the concept of 'valid consent' which is freely given and clearly established. This article contrastingly, limits the concept of consent as well stating that intervening states may not stay outside the bounds of permit provided by consent and there can be no acceptance to wrongful breach of International Humanitarian law and International human rights law.

Setting a target in plying of drones is considered as the most important aspect of attacking. It serves as one of the 'cardinal principle'. Priority in setting up the target is distinguishing between civilians and the combatants[17]. The most basic rule to set up a target is a combination of aspects including precaution, proportionality and the intelligence of distinction. The method by which individuals are deemed to have directly participated in hostilities, and thereby lost their civilian protection, is of vital importance when assessing the lawfulness of particular drone strikes. This is because it is the category of individuals directly participating in hostilities

[15]ICRC, 'International Humanitarian Law and the Challenges of Contemporary Armed Conflicts' (Report on the 31st International Conference of the Red Cross and Red Crescent, 31IC/11/5.1.2, Geneva 2011) 10.

[16]ILA Committee on the Use of Force, 'Final Report on the Meaning of Armed Conflict in International Law' (Hague Conference, 2010) 2.

[17]'Attacks' are defined as acts of violence against the adversary, whether in offence or in defence: Additional Protocol I, Art 49(1).

INDRAPRASTHA LAW REVIEW

who are most likely to be targeted by drones, in so-called 'signature strikes'[18]. Article 48 of Additional Protocol talks about the distinction between the civilians and the combatants during the attack. A general protection for the civilians that they should not be attacked is also provided under Article 51(1) of Additional Protocol I and Article 13(1) of Additional Protocol II. They are also binding on states which are not a party to the protocol. Article 52(2)[19] of Additional Protocol it is stated that attacks shall be limited strictly to the military objectives. Article 57 widens up the scope of protection of civilians stating that everything possible should be done to protect the civilians as well as the property of civilians. However, most of the drone strikes have produced more destruction than anticipated. There have been many instances where the drone strikes have killed someone other than the person targeted. Military necessity to use drones serves as a principle of International Humanitarian Law and is reflected under article 52(2) and 54(5) of Additional Protocol I and Additional Protocol II.

III. HUMANITARIAN IMPACT AND CIVILIAN HARM CAUSED BY THESE LOITERING MUNITIONS

The kamikaze drones have both direct and indirect humanitarian consequences. The direct impact encompasses when the usage is limited to populated areas and infrastructure of the same like civilian casualties and damage to essential services. The indirect use comprises of disruption to humanitarian operations including, medical evacuations and aid convoys. The humanitarian impact also includes the psychological impact on the civilians this is generation of fear by unpredictable aerial threats which contributes to displacement and long-term trauma[20].

One of the prominent debates is on autonomy: Can a system autonomously select and engage targets? Since there is no treaty related to the same as such legal scholars and states vouch for 'meaningful human control' as a normative standard. Proponents argue that retaining human judgment at critical stages like target identification and engagement decisions is necessary to ensure compliance with distinction and proportionality obligations and to preserve human accountability[21].

---

[18]S Ackerman, 'US to Continue "Signature Strikes" on People Suspected of Terrorist Links' *The Guardian* (1 July 2016) <www.theguardian.com/us-news/2016/jul/01/obama-continue-signature-strikes-drones-civilian-deaths> accessed 20 June 2017.

[19] Attacks shall be limited strictly to military objectives. In so far as objects are concerned, military objectives are limited to those objects which by their nature, location, purpose or use make
an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time offers a definite military advantage: Additional Protocol I, art 52(2).

[20]N Melzer, *The Interpretive Guidance on the Notion of Direct Participation in Hostilities Under International Humanitarian Law* (ICRC 2009) 77.

[21]J Pictet, *Development and Principles of International Humanitarian Law* (Martinus Nijhoff 1985) 62.

INDRAPRASTHA LAW REVIEW

Hitting communities isn't only about explosions tearing through streets. Lives lost, injuries piling up - those effects strike fast. Yet consequences stretch beyond wreckage. When strikes land, medical transport often stalls. Relief routes shut down. First responders find paths blocked, work slowed, efforts scattered. Movement itself becomes tangled. Beyond the immediate danger, living under endless skies of uncertainty takes its toll on human resilience. Stress builds in waves, sudden movements scatter households, forcing escapes that carve memories far beyond physical damage. Not only does suffering show in shattered walls but also in rules meant to protect dignity during conflict. Under international law, deliberate strikes against non-combatants fall clearly under criminal acts, as outlined by binding treaties. Evaluating drone tactics - especially those without return paths - requires more than technical analysis; it demands attention to grief carried silently, ruins left behind, and lives altered permanently.

In the most recent case of *South Africa vs Isreal (2024)*[22], In early 2024, South Africa brought a case before the International Court of Justice accusing Israel of breaching the Genocide Convention.

International Court of Justice, while taking into account the catastrophic situation in Gaza confirmed the need to immediate and effective implementation of halt in the military offence in the area including Rafah. Israel had employed various autonomous weapons including Kamikaze drones, causing destruction of civilians and property. The sheer scale of the harm makes it clear: we need to stick to the rules of war keep civilians out of it, weigh the consequences, and take real steps to prevent needless suffering. International Humanitarian Law demands nothing less.

According to UN Global Counter-Terrorism strategy has reaffirmed that states must make sure that measures taken to combat terrorism comply with all the obligations under international law, human rights law and refugee law. Article 2 of International Covenant on Civil and Political Rights (ICCPR) highlights that the protection applies only to a state' within its jurisdiction and its territory' however European Court of Human Rights, UN Human Rights Council and UN Human Rights Committee have interpreted the term 'jurisdiction' as an extra territorial one as a drone can be flown even a thousand miles away despite having control in another area[23]. The most recent case of drones used by Isreal in the Palestinian territory was

[22]Application of the Convention on the Prevention and Punishment of the Crime of Genocide in the Gaza Strip (South Africa v Israel) (Provisional Measures) (Order) ICJ Case No 192 (26 January 2024).

[23]M Dennis, 'Application of Human Rights Treaties Extraterritorially to Detention of Combatants and Security Internees: Fuzzy Thinking All Around?' (2006) 12(2) ISLA Journal of International & Comparative Law 459.

INDRAPRASTHA LAW REVIEW

subject to IHRL but extraterritorial uses by other states that do not fall within this scenario would not be. Let's look at it from a different angle think about how governments, agencies, or even regular people use drones in other countries.

Justice Leggatt from the UK Court of Appeal took things a step further in the Al-Saadoon case. He said lethal force is the most extreme way to control someone. A close examination of legal principles reveals support for applying international human rights standards to drone operations beyond national boundaries. Targeting an individual by drone does not simply involve remote activation - it places that person within the operational reach of another state's authority. It seems inconsistent to argue these protections apply inside prisons yet vanish during aerial attacks. The logic behind safeguarding lives should hold regardless of location or method.[24]

When permission comes from within, international human rights law begins to take effect - sometimes through invitation, sometimes mere silence. Countries like Afghanistan, Iraq, Pakistan, Somalia, and Yemen illustrate this pattern clearly. In these places, drone attacks occur under that implied consent, making human rights standards relevant almost every time. Quite unlike cases where one state claims self-defense while operating against another's will, absent approval altogether[25].

Outside times of war, deliberate killing stands prohibited by the European Convention on Human Rights. In the absence of active hostilities, taking life may never be random or ungrounded. Drone strikes beyond battlefields tend to breach international human rights law. Such actions require exceptional reasoning to avoid being seen as illegitimate. A high threshold exists before they could ever qualify as acceptable.[26]

One worry tied to the 1980 Convention on Certain Conventional Weapons stands out clearly. Though meant to curb tools causing severe harm or striking without distinction, most rules zero in on leftover explosives after conflicts end. Because wording stays vague across agreements, devices such as suicide drones often face review only when used, not before. Outright prohibition rarely happens under current terms.[27]

---

[24]Al-Saadoon v Secretary of State for Defence [2015] EWHC 715 (Admin) [95].

[25]'Summary of Information Regarding US Counterterrorism Strikes Outside Areas of Active Hostilities' (United States Director of National Intelligence, 1 July 2016) <www.dni.gov/files/documents/Newsroom/Press%20Releases/DNI+Release+on+CT+Strikes+Outside+Areas+of+Active+Hostilities.PDF> accessed 20 June 2017.

[26]N Melzer, *Targeted Killing in International Law* (OUP 2008) 184-221.

[27]Convention for the Protection of Human Rights and Fundamental Freedoms (opened for signature 4 November 1950, entered into force 3 September 1953) ETS No 5 ('ECHR'), art 3; American Convention on Human Rights (adopted 22 November 1969, entered into force 18 July 1978) 1144 UNTS 123 ('ACHR'), art 5(2); African Charter on Human and Peoples' Rights (adopted 27 June 1981, entered into force 21 October 1986) 1520 UNTS 217 ('ACHPR'), art 5(2).

INDRAPRASTHA LAW REVIEW

A breach of Article 8 under the Rome Statute occurs when attacks deliberately focus on non-combatants or proceed despite foreseeing disproportionate harm to them. Determining casualty status, then, goes beyond record-keeping - it forms the foundation for assessing whether military actions align with legal standards. Support for this approach comes from established principles within International Humanitarian Law. Article 12 of the Fourth Geneva Convention deals specifically with the dead, including civilians. Articles 33 and 34 go further, laying out how missing persons should be identified and recovered. Israel's High Court of Justice, in the Jenin (Mortal Remains) case, said these rules apply to everyone no matter who's side they were on. To honour everyone who's died, every side needs to look for their own fallen, their enemies, and any civilians[28].

IV. POLICY RECOMMENDATIONS FOR CAUTIOUS USE OF KAMIKAZE DRONES

With confusion surrounding suicide drones, clear guidance may shape their role in combat areas. Because military benefits come alongside ethical dangers and spread concerns, one balanced strategy could maintain purposeful deployment. Where risks grow, structured oversight might follow. Though intended for precision, unintended outcomes demand attention. When tools evolve rapidly, rules must adjust without delay. Since global norms shift, local decisions carry wider weight. From restraint, effectiveness often emerges. Human control may weaken when machines make life-or-death choices. Oversight must stay clear, deliberate, fixed within national and global frameworks. Rules should ensure people, not algorithms, carry responsibility for strikes. Systems acting alone could bypass legal safeguards. Judgment belongs where consequence is understood. Authority cannot shift to software beyond human reach. Next comes the introduction of focused controls aimed at parts and networks that directly assist weapon development, yet allowing space for lawful trade and aid-related drone operations. Following this, efforts already made to strengthen civilian rights must continue, alongside increased funding for practical protections - such as safe shelters, emergency movement strategies, and rule-of-law frameworks. Another path involves deploying adaptable monitoring tools that defend populations but do not lend themselves to abuse. Later still appears openness through documentation: nations might share details about their policies, operational patterns, and protective steps regarding hovering weapons, fostering shared insight across borders. Cooperation across civilian and military efforts comes into focus at step five. Engagement among state authorities, producers, and aid groups forms part of this framework.

[28] Barake v Minister of Defense (2002) HJC 3114/02 56(3) PD 11.

INDRAPRASTHA LAW REVIEW

Design approaches may reduce misuse potential while preserving lawful applications. One way involves embedding constraints during development phases. Legal certainty appears in closing considerations. Interpretation of current rules gains importance when dealing with lingering ordnance. Questions arise around accountability under international standards. Command oversight becomes relevant where systems affect populated zones. Consequences for infrastructure enter discussion alongside civilian safety. Frameworks already in place require review through updated lenses. Clarity emerges only when roles and liabilities are mapped precisely.

One of the turning points in acknowledging the vagueness in application of the autonomous weapons was The United Nations General Assembly Resolution 79/L.77 (A/RES/79/62)[29] adopted on 2 December 2024 during its seventy-ninth session. The General Assembly passed a resolution on autonomous weapon systems 166 countries backed it with 3 against (Belarus, North Korea and Russia) and 15 abstentions (including China, India, Iran and Israel), demonstrating broad support for advancing international dialogue on the governance of lethal autonomous weapons. It mainly focuses on the issues related to Lethal application of Autonomous Weapons System (LAWS), i.e. weapons that can select and engage targets without meaningful human control. The resolution not only reflects on the widespread international concern about the humanitarian, legal, security and technological implications of the emerging military technology but also addresses the framework required for the same in the existing international law. It is recalled within the priority resolution that earlier efforts addressed autonomous weapons, while confirmation follows without ambiguity: international legal frameworks remain applicable. These include the charter of the United Nations, alongside principles found in humanitarian, human rights, and criminal law - each binding across weapon systems. Legal standards are positioned at the core when shaping how such tools emerge, function, or engage life-ending actions. Attention turns toward potential fallout should lethal autonomy be deployed; implications reach beyond immediate effects into broader instability. Escalatory patterns may quicken amid crises due to flawed assessments, conflict entry points lower, diffusion increases - especially if accessed by entities outside state control. Such spread could intensify ongoing hostilities, deepen suffering among populations caught in violence. Even as technological progress accelerates, acknowledged comes with it a dual reality - one where innovation aids societal well-being, yet simultaneously demands stronger safeguards for those exposed to digitally transformed warfare.

[29]UNGA Res 79/62 (2 December 2024) UN Doc A/RES/79/62.

INDRAPRASTHA LAW REVIEW

Most importantly the General Assembly has held informal consultations in 2025 as a dedicated forum where member states, observer states and other relevant stakeholders to present their views and proposals regarding the same.it will help in reflecting an intention to pursue a comprehensive and inclusive approach that brings together diverse perspectives to address the full range of challenges in the same. The resolution however doesn't call for establishment of any legally binding treaty to ban or regulate the autonomous weapons system but it builds on calls by the UN Secretary General and human rights bodies for such instruments and emphasises the importance of ongoing, multilateral engagement and cooperation to ensure ethical standards in the application and usage of the weapons. The Assembly had passed an earlier resolution that focused on the humanitarian, legal, security, technological, and ethical problems tied to these system[30].

V. CONCLUSION

The loitering munitions like Kamikaze drones have invariably exemplifies the advancement of technology that has reshaped the character of conflict. Affordable to produce, yet straightforward in operation, these tools deliver strong impact during combat. Still, they pose serious danger to non-combatants, whose safety must not be overlooked. Balancing progress means allowing room for genuine advances in everyday technology while resisting automatic warfare. Human control over critical decisions cannot be handed off. Clear boundaries prevent misuse, even when benefits seem tempting.

Nowhere near resolution, talk about suicide drones continues evolving. As tech moves forward, state forces alongside rebel factions discover fresh applications. Shifting ground defines the discussion - each development pulls it further from where it began. Most effective answers rely less on tools or software. What matters more is determined leadership, well-designed regulations, joint efforts across nations, along with firm safeguards for non-combatants - without these, innovation might erode the thin barriers preventing warfare from becoming total chaos. For such standards to hold, they must be practical, capable of being enforced, and accepted worldwide; otherwise, demand simply shifts toward underground networks where controls vanish.

What counts as dual-use technology has become clearer through loitering munitions. Precision targeting exists alongside protective functions - yet risks to civilians grow faster than rules can follow. Responsibility fades when weapons spread easily into harmful hands. Solutions need more than one approach: strong regulations stand with firm ethics, meaningful human control

[30]UNGA Res 78/241 (22 December 2023) UN Doc A/RES/78/241.

INDRAPRASTHA LAW REVIEW

pairs with efforts to limit spread, while funding shifts toward safeguarding communities. Staying safe must not shut down helpful uses like aid delivery or crisis response - that balance defines the task ahead. Every shift in weapon design shifts also the weight of our choices - on oversight, control, on ties with tech firms - and those choices tilt toward order or disorder. Not only experts behind screens or uniforms shape outcomes; influence flows through policy halls, quiet talks, public voices too. What matters grows clear near the breaking point: shared judgment shapes whether systems assist people or override them. Responsibility must remain rooted in human hands, never outsourced to code or sensors. Decisions made now echo later in streets, shelters, lives touched by strikes decided miles away.

INDRAPRASTHA LAW REVIEW

BEYOND TECHNOLOGICAL SOLUTIONISM: LEGAL AND ECONOMIC BARRIERS TO BLOCKCHAIN-BASED SHAREHOLDER DEMOCRACY

- Ms. Anjali Sharma*
- Dr. Neha Kapur Chawla**

ABSTRACT

In this paper, we have tried to examine whether blockchain-based voting systems can meaningfully empower minority shareholders in corporate governance. The research question emerges from the growing advocacy for blockchain technology as a projected solution to minority shareholder marginalization, particularly the opacity and inefficiency of traditional proxy voting mechanisms. Given the substantial investment in blockchain voting pilots by major financial institutions and the technology's promise of transparency and cost reduction, it is critical to assess whether these claims withstand empirical and theoretical scrutiny. The paper begins by establishing the fact that concentrated ownership and agency conflicts disadvantage minority shareholders. It then analyses blockchain's technical capabilities like immutability, decentralization, and transparency, and evaluates their purported benefits for corporate voting, including reduced intermediary costs and enhanced vote verification.

However, the core argument challenges this technological optimism. The paper systematically demonstrates that blockchain cannot address the fundamental barriers to minority participation that are, firstly, rational apathy stemming from infinitesimal voting power, secondly, cognitive costs of evaluating complex proposals, thirdly, information asymmetries favouring insiders, and lastly, legal bottlenecks such as proxy limits and quorum requirements discussed later in each section. Empirical analysis of blockchain voting pilots also reveals a conspicuous absence of participation data, suggesting these initiatives achieved technical feasibility without democratic transformation. It also further identifies how blockchain governance may increase existing power imbalances through plutocratic token distributions, technical complexity barriers, security vulnerabilities, and inadequate legal protections. It concludes by advocating for substantive legal reforms like mandatory plain-language disclosure, elimination of proxy voting caps, compulsory cumulative voting, and strengthened fiduciary enforcement, as a path to empowering minority shareholders, with blockchain serving only a facilitative rather than transformative role.

Keywords: Blockchain, corporate governance, proxy voting, shareholder democracy

I. INTRODUCTION

Majority shareholdings, or more generally, concentrated ownership, are a paradigm that is found in the vast majority of corporate structures.[1] Modern trends denote the increasing shift towards the majority of privately-controlled organizations, which can be mainly explained by the rising use of dual-class share structures.[2] These structures give founders the ability to hold a controlling share in equity and an excessive voting power amount, so that they control the

* Ms. Anjali Sharma, 3rd year Student, B.A.LLB (H), Rajiv Gandhi National University of Law, Punjab.
** Dr. Neha Kapur Chawla, Assistant Professor of Law, Rajiv Gandhi National University of Law, Punjab.

[1] Reinier Kraakman and others, *The Anatomy of Corporate Law: A Comparative and Functional Approach* (3rd edn, OUP 2017) 29–31.

[2] Lucian A Bebchuk and Kobi Kastiel, 'The Untenable Case for Perpetual Dual-Class Stock' (2017) 103 Va L Rev, 585, 594–96.

INDRAPRASTHA LAW REVIEW

corporate governance. Multi-class structures began to be known as an identical peak in 2004, as Alphabet Inc. made its public debut with a two-class structure in which 61.4 percent of the voting power was granted to the co-founders, executives, and board of directors of the company.[3]

In a company that is characterised by ownership concentration, the controlling shareholder, who is also the majority shareholder of the company, can influence the corporate affairs. Even a controlling stake that is less than a 50-per-cent voting quorum can lead to effective, or even de facto, dominance.[4] It is due to the rational indifference of minority stockholders in the retail sector, a phenomenon that will be discussed further in the following sections.

The main risks of concentrated ownership occur where the controlling shareholder uses his power to obtain personal advantages at the expense of the minority shareholder. Such self-dealing manifests in one way when corporate choices are motivated by self-interest, thus creating inefficiencies that are destructive to both investors and the economy at large. This relationship is often described as an agency conflict between a minority and majority shareholder.[5] Despite being the ostensible guardians of firm resources and dominating the assets-related decision-making, shareholders with the majority in the company usually do not have the same goals as minority shareholders, and create several conflicts.[6]

To ensure fair participation of minority shareholders, blockchain enthusiasts argue that it is the panacea for all corporate governance issues.[7] But is it really so? This article addresses a central research question: Can blockchain technology effectively democratize corporate governance by solving the apathy of minority shareholders? The central argument presented here is that while blockchain offers technical transparency, it is ill-suited to address the fundamental economic calculations and legal bottlenecks that actually drive shareholder indifference. To demonstrate this, the paper is structured as follows: first, it outlines the benefits of blockchain in reducing intermediaries; second, it critiques the technical and security barriers of decentralized voting; third, it analyzes the "rational apathy" of investors; and finally, it proposes non-technological legal reforms. This paper contributes to the existing literature by shifting the focus from technological feasibility to the legal and economic limitations of blockchain in corporate governance.

[3] Google Inc, 'Registration Statement on Form S-1' (29 April 2004) 119.
[4] *Kahn v Lynch Communication Systems, Inc* 638 A2d 1110, 1113–14 (Del 1994).
[5] Simon Johnson and others, 'Tunneling' (2000) 90 Am Econ Rev 22, 22–24.
[6] Zohar Goshen and Assaf Hamdani, 'Corporate Control and Idiosyncratic Vision' (2016) 125 Yale LJ 560, 565–67.
[7] David Yermack, 'Corporate Governance and Blockchains' (2017) 21 Rev Fin 7, 26–28.

INDRAPRASTHA LAW REVIEW

II. BLOCKCHAIN TECHNOLOGY: THEORETICAL FOUNDATIONS AND OPERATIONAL PRINCIPLES

The minority shareholders have long been deprived of fair participation in the corporate governance framework. They face challenges in exercising their votes and voicing concerns.[8] The cost of the intermediary-mediated vote-casting process is quite high and is often non-transparent in terms of the tallying of votes.[9] Advocates of blockchain voting believe that its implementation is capable of improving visibility, enriching governance, and magnifying minorities since it offers a direct, verifiable voting system that excludes superfluous intermediaries and limits the costs involved.[10]

Blockchain is a distributed registry that can be accessed by many different actors simultaneously, and that does not have any specific controlling party.[11] All network nodes store a copy of the ledger over the local substrate. Upon materialisation in a transaction, it is a data block with transactional containment details, a time mark, and a unique identifier. When a certain number of transactions are performed, the network performs a validation process before adding the block to the previous ledger block chain. This authentication procedure is based on cryptography. Any form of intermediation to a sealed block, hence, distorts its hash, and this instantaneously informs all agents of the deviation.[12]

Blockchain is, therefore, resilient to manipulation. Any fraudulent attempt would require changes not only to one block but also to all the subsequent blocks of most of the network, which is untenable as the network grows.[13]

The whole mechanism is independent, without a central authority. Official data are not recorded by any financial institution, governmental organ, or even by corporatisation. Rather, a copy is maintained by a participant.[14] This decentralized structure eliminates the centralisation that is common in the traditional record-keeping systems. A share ownership ledger available in real-time is provided by blockchain. All the shareholders will be assigned non-transferable digital

[8] Umakanth Varottil, '*The Evolution of Corporate Law in Post-Colonial India: From Transplant to Autochthony'* (2016) 31 Am U Int'l L Rev, 253, 296–98.

[9] Securities and Exchange Board of India (SEBI), 'Report of the Working Group on Issues Relating to Proxy Advisors' (2019) 4–6.

[10] Anne Lafarre and Christoph Van der Elst, *'Blockchain Technology for Corporate Governance and Shareholder Activism*' (2018) 15 European Company and Financial Law Review, 57, 61–63.

[11] NITI Aayog, 'Blockchain: The India Strategy — Towards Enabling Ease of Business, Ease of Living and Ease of Governance' (Strategy Paper, January 2020) 6–8.

[12] Arvind Narayanan and others, '*Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction'* (Princeton University Press 2016) 11–14.

[13] Satoshi Nakamoto, 'Bitcoin: A Peer-to-Peer Electronic Cash System' (2008) 3–4 <https://bitcoin.org/bitcoin.pdf> accessed 13 January 2026.

[14] Institute for Development and Research in Banking Technology (IDRBT), 'White Paper on Applications of Blockchain Technology to Banking and Financial Sector in India' (2017) 14–16.

INDRAPRASTHA LAW REVIEW

tokens that display their voting rights. As a shareholder votes, their vote gets registered immediately on the blockchain; the network will ensure that the vote was properly registered and is not altered.[15]

III. SYSTEMIC VULNERABILITIES IN TRADITIONAL ELECTORAL PROCESSES

The traditional process of share voting by shareholders is marred by various shortfalls, one of them being the obscurity and complexity of the process.[16] Annual general meetings that provide shareholders with a direct or indirect voting right are underutilized. Proxies or third parties approved by the management are preferred to cast their votes on their behalf. Although the data on substantive proposals are required to be disclosed to shareholders, a high proportion of the shareholders do not receive or examine the proxy material.[17] They ultimately end up relinquishing their democratic prerogative.

One notable example of proxy abuse occurred at Procter and Gamble Co., where an estimated $60 million was charged to shareholders for the board election.[18] The recount exercises revealed a vast number of illegal proxy voters. This shows that the opacity of the traditional system creates inefficiencies that could be theoretically prevented by a blockchain ledger.

In the Tata Consultancy Services shareholder dispute, minority shareholders mobilised against management decisions on executive compensation.[19] While this illustrates that minority activism is not structurally impossible, it required exceptional institutional coordination that is neither replicable nor scalable under current governance arrangements. The very rarity of such outcomes underscores the depth of the structural barriers this paper interrogates.

Similarly, in the Siemens India postal ballot, minority shareholders successfully opposed an initial acquisition bid price, compelling its revision upward.[20] These episodes are instructive precisely because they are exceptional: they reveal that effective minority intervention is contingent on concentrated institutional holdings, significant economic stakes, and fortuitous procedural circumstances — conditions that blockchain-based voting does nothing to replicate for dispersed retail shareholders. These cases therefore serve not as proof of minority

[15] David Yermack, '*Corporate Governance and Blockchains'* (2017) 21 Rev Fin, 7, 26–28.
[16] Committee on Corporate Governance, 'Report of the Committee on Corporate Governance' (SEBI, 5 October 2017) 60–62.
[17] Committee on Corporate Governance (n 9).
[18] David Benoit, 'P&G vs. Peltz: The Most Expensive Shareholder War in History' *Wall Street Journal* (New York, 6 October 2017).
[19] *Tata Consultancy Services Ltd v Cyrus Investments P Ltd* (2021) 9 SCC 84.
[20] *In re Siemens Ltd*, 'Voting Results of Postal Ballot' (BSE Filing, 1 July 2023).

INDRAPRASTHA LAW REVIEW

empowerment under the current system, but as illustrations of the extraordinary conditions required for it to occur.

IV. CONCEPTUAL FRAMEWORK OF BLOCKCHAIN TECHNOLOGY AND ITS POTENTIAL BENEFITS

Enhancing Electoral Transparency Through the Mitigation of Proxy Voting

The traditional proxy voting system creates verification issues based on an ambiguously trailed data flow.[21] The dominant system that upholds the rights of shareholders in a long chain of nominees and custodians. It is characterized by a labyrinth of bureaucratic circles where shares go through many intermediaries before the rightful ownership is established.[22]

Since the conventional means cannot include the actual, real-time information regarding share ownership, shareholders rely on corporate records that do not include independent verification. In addition, live and transparent registries are not available, which means that vote-count issues cannot be resolved[23]. Though in most cases proxies have discretionary voting authority, which can be used towards personal interests and not shareholder interests. A significant portion of the shareholders do not get or read the proxy documents, thus over-trusting proxies and consequently losing their right to vote.[24] Therefore, the issue of transparency compromises the position of the shareholders in determining whether their votes were duly cast.

These instances of over-voting can be eliminated because of blockchain technology. Securities borrowing and lending mechanisms in the current paradigm can lead to the number of votes being even greater than the number of shares.[25] With the help of accurately registering shareholdings on a ledger, blockchain will only tally authentic shareholders and make every share have a single vote.

Reducing Electoral Expenditures

Companies spend millions of dollars on shareholder meetings, proxy documents, and intermediary expenses. Blockchain technology is going to save significant sums of money in those areas.[26] The distributed ledger converts the disclosure documents electronically, which reduces the necessity of in-person meetings and print resources. The implementation of

[21] Marcel Kahan and Edward Rock, 'The Hanging Chads of Corporate Voting' (2008) 96 Geo LJ, 863, 865–68.
[22] *Companies Act 2013*, s 89; Securities and Exchange Board of India (SEBI), 'Report of the Committee on Fair Market Conduct' (2018) 18–20.
[23] Kahan and Rock (n 21).
[24] Kahan and Rock (n 21).
[25] Henry T C Hu and Bernard Black, 'The New Vote Buying: Empty Voting and Hidden (Morphable) Ownership' (2006) 79 S Cal L Rev, 811, 823–25.
[26] Lafarre and Van der Elst (n 10).

INDRAPRASTHA LAW REVIEW

blockchain eliminates intermediaries in transactions, which helps reduce the incidence of fraudulent or unauthorized votes. It also avoids the payments to the proxy devices that currently organize the voting process.[27]

Under the law, companies are under an obligation to share material information relevant to shareholder voting, and should meet the cost of making such disclosures.[28] This led to the expense of millions of dollars in printed proxy documents. Blockchain solves this by creating a single digital environment for conducting meetings, bypassing the heavy disclosure and proxy issuance expenses. In addition, the multi-layered system of proxy voting, which involves a large number of nominees and custodians, will be simplified, which reduces the administrative costs of this system. Therefore, blockchain could replace the complex infrastructure historically mandated to connect shareholders, authenticate ownership, and count votes.

Blockchain as a Regulatory Transparency Tool: SEBI and Insider Trading

The current legal framework, under s 12A of the Securities and Exchange Board of India Act 1992 and the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations 2015, strictly forbids insider trading to protect market integrity.[29] However, high-profile enforcements, like *RIL v. SEBI* and *HLL v. SEBI*, have not succeeded in stopping the continuation of illegitimate trading activities.[30] The systematic repetition of those vices proves that the statutory penalties do not suffice without enhanced transparency measures. The answer to this issue apparently lies in blockchain technology.

Within a public blockchain environment, all transfers of shares are stored in an unchanging ledger with a specific time stamp, which makes such activity immediately detectable to the market.[31] Such a mechanism successfully offsets the informational asymmetries, which are traditionally used by seasoned insiders. Regulatory agencies like SEBI can be given an implicit right to view algorithmic, real-time trading trends, even under a permissioned or a private blockchain configuration, by granting them observer nodes. Unlike the historical need to investigate adverse results caused by post-hoc and sporadic investigations.

The assurance of detection that a distributed ledger offers is stronger than an irregular application of statutory measures in most instances as a psychological deterrent. The system

[27] Ministry of Corporate Affairs, '*General Circular No 14/2020'* (8 April 2020).
[28] *Companies Act 2013*, s 102(1).
[29] *Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations 2015*, reg 4(2)(c)(iv); *Securities and Exchange Board of India Act 1992*, s 12A.
[30] *Hindustan Lever Ltd v SEBI* (1998) 18 SCL 311 (SAT); *Reliance Industries Ltd v SEBI* (SAT, 5 November 2020) Appeal No 28 of 2018.
[31] NITI Aayog, 'Blockchain: The India Strategy — Towards Enabling Ease of Business, Ease of Living and Ease of Governance' (Strategy Paper, January 2020) 18–20.

INDRAPRASTHA LAW REVIEW

works to curtail illegal activities by permitting government regulators to become a part of the network and gain access to such up-to-date records.

V. CHALLENGES AND LIMITATIONS OF BLOCKCHAIN IMPLEMENTATION IN VOTING SYSTEMS

Advocates believe that minority shareholders will be empowered and the corporate governance democratised by blockchain with its clear and unquestionable voting processes.[32] This is, however, contested by empirical evidence. Practically, token-based governance can lead to the development of additional barriers that can maintain systematic marginalization of minority stakeholders. Instead of reducing governance weaknesses, such blockchain deployments tend to solidify incumbent power imbalances. They may introduce new forms of vulnerabilities for the very individuals they were thought to help.

Limitations of Decentralized Voting Architectures

There are inherent flaws with token-mediated voting. As every token would directly be translated to a single vote, the degree of wealth has a corresponding effect on corporate results. Empirical analysis reveals this arrangement creates plutocratic structures where policy is determined by large-capacity players.[33] The study of high-performing DAOs shows that the majority of voting power is concentrated in the hands of a small group of large shareholders. Participation rates among the small ones continue to remain very low.[34] This tendency is not a mere occurrence of the stock exchange but a structural necessity. Rational smaller stakeholders tend to vote out when it requires technical capacity, and the transaction costs of voting are too high. The result is similar to that of traditional forms of corporate governance, wherein the common shareholders are most likely to vote their abstentions and have weaker forms of protection.[35] Although the conventional framework provides regulatory control and fiduciary-based services, these protections are diluted in blockchain governance, without reducing the power concentration.[36]

---

[32] Mark Fenwick and others, '*The End of the Corporation'* (2019) 19 Eur Bus Org L Rev, 163.

[33] Vitalik Buterin, 'Moving Beyond Coin Voting Governance' (2021) <https://vitalik.ca/general/2021/08/16/voting3.html> accessed 15 January 2026.

[34] Youssef Faqir-Rhazoui, Javier Arroyo and Samer Hassan, *'A Categorization of Decentralized Autonomous Organizations: The Case of the Aragon Platform*' (2021) *IEEE International Conference on Blockchain* 32, 38–39.

[35] David Yermack, '*Shareholder Voting and Corporate Governance'* (2010) 2 *Annual Review of Financial Economics,* 103, 114–117.

[36] Primavera De Filippi and Aaron Wright, *Blockchain and the Law: The Rule of Code* (Harvard University Press 2018) 140–146; David K Fauchald and Joakim Hauge, 'Governance through Blockchain? The Case of Decentralized Autonomous Organizations' (2021) 58 *Stanford Journal of International Law* 1, 18–23.

INDRAPRASTHA LAW REVIEW

These structural tendencies are not merely theoretical. Empirical analysis of major decentralised autonomous organisations provides quantitative confirmation of the plutocratic dynamics that token-based voting produces. A systematic study by Fritsch and others of 21 major DAOs found that the median proportion of token holders participating in a given governance proposal was 3.8%, with the top ten token holders controlling a median of 56.9% of total voting power.[37] On Uniswap, whose UNI governance token enables voting on protocol changes, an analysis of early governance rounds found that fewer than 10% of token holders participated in most proposals, while a small cluster of venture capital and founding wallets controlled decisive majorities. In Compound Finance governance, average voter turnout across proposals has consistently remained below 5% of circulating COMP supply. The April 2022 Beanstalk protocol attack, in which an attacker obtained a flash loan of approximately $1 billion in stablecoin assets, acquired a supermajority of governance tokens within a single transaction block, passed a malicious proposal, and extracted approximately $182 million from the protocol before repaying the loan, represents a vivid illustration of how token-weighted voting not only concentrates power in wealthy actors but creates acute systemic vulnerability.

These figures carry important comparative weight. Average participation rates in conventional listed-company shareholder meetings, though also low, typically fall between 10 and 30% of shares represented by vote. The DAO governance data therefore does not merely replicate traditional corporate governance failures — it represents a structural deterioration. This is precisely because the absence of the legal architecture that moderates traditional corporate governance (mandatory disclosure regimes, fiduciary duties, judicial supervision, and derivative action rights) leaves token holders without the minimum protections that, however imperfectly, restrain majority oppression in conventional company law.[38]

Accessibility Barriers: Technical Complexity and User Adoption

The compounding technical environment imbalance provides a preferential treatment to the majority shareholders, which is an exclusionary form of gatekeeping. Blockchain governance proposals often include intriguing and advanced smart-contract modifications that require strong technical expertise. However, most token holders lack the technical expertise in blockchain architecture, financial modelling, or cryptographic protocols that would be

[37] Robin Fritsch and others, 'Analyzing Voting Power in Decentralized Governance: Who Controls DAOs?' (2022) *IEEE International Conference on Blockchain and Cryptocurrency* 1, 4–6; Vitalik Buterin, 'Moving Beyond Coin Voting Governance' (2021) <https://vitalik.ca/general/2021/08/16/voting3.html> accessed 15 January 2026; for the Beanstalk attack, Publius, 'Beanstalk Farms: Emergency Response to the Governance Exploit' (17 April 2022) <https://bean.money/blog/beanstalk-exploit-recap> accessed 15 January 2026.

[38] Yermack (n 7) 16–18; Lafarre and Van der Elst (n 10) 68–70.

INDRAPRASTHA LAW REVIEW

necessary to be effectively engaged.[39] Such asymmetry of knowledge provides ample grounds to manipulate. The hegemonic actors can marginalize the minority by veiling or using ambiguous wording. Conversely, conventional corporate governance provides the stakeholders with disclosure requirements that reduce these imbalances.[40] In blockchain, the majority of the actors may fail to decipher the underlying code, where decisions are encoded.[41]

Security Vulnerabilities and Fraud Risks in Blockchain Voting Systems

The so-called blockchain transparency is, in fact, restricted. Although blockchain entries are public and immutable, the lack of substantive knowledge makes that transparency insignificant.[42] Minority stakeholders often cannot make the interpretations of the subjects on which they cast their votes.[43] Although they must be able to check the token-weighted result. The ledger itself is a hindrance to this because it is immutable, and that makes it difficult to correct the perverse proposals once passed.[44] Traditional corporate governance, on the other hand, provides the right to judicial review and regulation in cases where the rights of minorities are violated.[45] A blockchain platform, therefore, is only widening the line of voting. Also, it remains vulnerable to the same plutocratic forces that created the harmful dynamics in the first place.

Minority participants are subject to asymmetric risks from security vulnerabilities. Advanced attackers capitalize on logical errors and re-entrancy attacks on blockchain voting systems.[46] An example of that is the flash-loan attack, where attackers obtain huge token quantities by borrowing large sums to make a malicious offer and redepositing the acquired tokens before interference can take effect, and thus manipulate governance systems into passing detrimental resolutions.[47] Empirical studies have been recording cases in which such attacks led to expropriation of funds or destabilisation of projects, which then caused losses to the minority

[39] Samani Hassan, Primavera De Filippi and Wessel Reijers, 'Decentralized Autonomous Organization' in F Xavier Olleros and Majlinda Zhegu (eds), *Research Handbook on Digital Transformations* (Edward Elgar 2023) 220–226.
[40] John C Coffee Jr, '*Market Failure and the Economic Case for a Mandatory Disclosure System'* (1984) 70 *Virginia Law Review,* 717, 720–735.
[41] Kevin Werbach, *The Blockchain and the New Architecture of Trust* (MIT Press 2018) 93–100.
[42] Aaron Wright and Primavera De Filippi, 'Decentralized blockchain technology and the rise of Lex Cryptographia' (2015) 139–146.
[43] Kevin Werbach, '*Trust but verify: why the blockchain needs the law'* (2018) 33 Berkeley Technology Law Journal, 488–550.
[44] Georgios Dimitropoulos, '*The Law of Blockchain'* (2020) 95 Washington L. Rev, 1130.
[45] *Weinberger v UOP Inc,* 457 A 2d 701 710 (Del 1983).
[46] Shaanan Cohney and others, 'Coin-Operated Capitalism' (2019) 119 Columbia Law Review, 591, 650.
[47] Bruno Mazorra and others, 'Mapping the DeFi Crime Landscape: An Evidence-Based Picture' (2024) 11 Journal of Cybersecurity, 1, 12.

INDRAPRASTHA LAW REVIEW

investors.[48] Influential investors are well-endowed to afford all-time security checks. On the other hand, smaller shareholders do not have the necessary equipment or expertise to identify, examine, or overturn such manipulation.[49]

Legal Uncertainty and Regulatory Infrastructure Gaps

Decentralisation posing as centralisation is arguably the most premature disregard of blockchain governance. Research findings indicate that even when it appears that the decision-making power is given out, founders and development teams continue to have most of it.[50] Such insiders receive preferential treatment in token assignments. To consolidate their position, they use delegated structures. It concentrates voting in a small cadre, multi-signature wallets that give veto to a small group of cadres, or discretionary influence.[51] Trends show that this delegation does not contribute to bona fide participation, but rather perpetuates the dominance of incumbents.[52] The token holder can authorize big stakeholders to vote on behalf of the token holder. Intermediaries might have changed, but the essence of the power difference remains the same.[53]

Where there is a failure in governance due to deficiencies in regulations, minority investors suffer without having remedial options. Traditional corporate law provides minority shareholders with the statutory remedies, derivative proceedings, and judicial redress in cases of fiduciary violations or majority oppression.[54] However, blockchain governance operates in a precarious legal environment in which these protective measures are imprecise and vague. Two major problems arise: first, a lack of protection against governance failures, and second, the degree of legislation imposes limits on the activities of the DAO.

Blockchain technologies are anonymized and characteristically global, exacerbating the problems of enforcement.[55] Even in situations when the negative effects are identified, the minority shareholders face significant challenges in seeking redress.[56] The legal environment

[48] *Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO*, Exchange Act Release No 81207, 9 (25 July 2017).
[49] Cohney and others (n 44).
[50] Dirk A. Zetzsche and others, '*The Distributed Liability of Distributed Ledgers: Legal Risks of DAOs'* 2018 U. Ill. L. Rev, 1361, 1368–70 (2018).
[51] *Commodity Futures Trading Comm'n v Ooki DAO,* No 3:22-cv-05416, 2022 WL 17822445, 12 (ND Cal 20 December 2022).
[52] Robin Fritsch and others, '*Analyzing Voting Power in Decentralized Governance: Who Controls DAOs?'*, 'Analyzing Voting Power in Decentralized Governance: Who Controls DAOs?' (2022) *IEEE International Conference on Blockchain and Cryptocurrency* 1, 8.
[53] Fritsch and others (n 52).
[54] Usha R. Rodrigues, '*Law and the Blockchain'*, 104 Iowa L. Rev, 679, 709–12 (2019).
[55] Primavera De Filippi and Aaron Wright, *Blockchain and the Law: The Rule of Code* (Harvard University Press 2018) 51–53.
[56] *Sarcuni v bZx DAO*, No 22-cv-00618-LAB-DEB, 2023 WL 2655827, 9–11 (SD Cal 27 March 2023).

INDRAPRASTHA LAW REVIEW

that ought to hear these kinds of disputes, who should be the subject of their grievances, and what means they should use to trace culprits under the anonymous identities remain largely unclear, hence, virtually protecting criminals off the hook.[57]

Counter-Arguments and the Potential of Hybrid Governance Models

A balanced assessment requires direct engagement with the strongest arguments made by blockchain proponents. Advocates correctly observe that certain specific problems in traditional proxy voting — notably broker non-votes, over-voting arising from securities lending, and delayed settlement of ownership records — are, at least in principle, amenable to blockchain solutions. The immutability of a distributed ledger eliminates the possibility of the kind of proxy card duplication and tabulation error that characterised the Procter and Gamble contest. These are genuine, if narrow, improvements.[58]

More significantly, proponents of blockchain governance have themselves recognised the plutocracy problem and proposed theoretical solutions. Vitalik Buterin, whose advocacy for blockchain governance is well-documented, has publicly acknowledged that coin-voting governance is fundamentally flawed and has proposed alternatives including quadratic voting, under which a voter casting n votes pays a cost proportional to n^2, thereby reducing the marginal influence of large token holders relative to a simple one-token-one-vote system. Lalley and Weyl have provided a formal welfare-theoretic justification for quadratic voting, demonstrating that under certain assumptions it generates more efficient allocations of decision-making authority than either direct democracy or plutocratic weighting.[59] A number of DAOs have experimented with delegated voting models, most notably the Optimism Collective, which operates a bicameral governance structure separating a Token House (composed of token holders) from a Citizens' House (composed of non-transferable identity-linked attestations), in an explicit attempt to decouple economic stake from governance influence.

However, these experimental models, while intellectually promising, have not demonstrated empirical success in resolving minority participation. Quadratic voting schemes remain vulnerable to Sybil attacks — whereby a single actor distributes tokens across many pseudonymous wallets to acquire disproportionate voting power at reduced quadratic cost —

[57] US Dep't of Just., '*Cryptocurrency Enforcement Framework'* 39–41, 45 (2020).
[58] Lafarre and Van der Elst (n 10) 75–77; Henry T C Hu and Bernard Black, '*The New Vote Buying: Empty Voting and Hidden (Morphable) Ownership*' (2006) 79 Southern California Law Review, 811, 840–45.
[59] Buterin (n 94); Steven P Lalley and E Glen Weyl, 'Quadratic Voting: How Mechanism Design Can Radicalize Democracy' (2018) 1 AEA Papers and Proceedings, 33, 33–37; Optimism Collective, 'Working Constitution of the Optimism Collective' (2022) <https://gov.optimism.io/t/working-constitution-of-the-optimism-collective/55> accessed 20 January 2026.

INDRAPRASTHA LAW REVIEW

and have not been deployed at scale in public company governance. The Optimism bicameral model is nascent and untested in adversarial conditions. Moreover, these design innovations remain irrelevant to the question of blockchain deployment within conventional corporate law, where statutory voting rights are determined by shareholding fractions fixed by company law and cannot be unilaterally redesigned by a protocol. The more fundamental point is that the governance engineering required to address blockchain's structural flaws is itself highly complex, contested, and unproven — characteristics that compound rather than resolve the accessibility barriers that disadvantage minority participants.[60]

VI. SYSTEMATIC ISSUES AFFECTING MINORITY SHAREHOLDERS

The Economic and Psychological Calculus of Shareholder Behaviour

Supporters of blockchain technology argue that it will make shareholders more involved, as it would make the voting process easier.[61] This view misunderstands the core problem behind it. This barrier of participation is not the procedural hurdle of voting, but the rational economic calculation that makes such voting pointless for the minority shareholder.[62] Empirical studies of shareholder behaviour indicate that shareholders regularly carry out cost–benefit calculations before they vote.[63] In cases where the cost of voting is higher than the expected benefits, the result is abstention.[64] This has been termed as rational apathy, and even by facilitating the process of voting, it does not change the underlying economic model.

Consider the economics. Take the case of a retail investor who has 100 shares in a company that has 10-million shares outstanding; her voting power is 0.001 percent. One of the proposals submitted to shareholders states that it will boost the company value by adding US 1 million in case it is approved. The investor gains on that at a ratio of US 10. The investor needs to make an informed choice when exercising his/her vote; he/she needs to examine the proposal, absorb its implications, and weigh his/her options. It involves the evaluation of complicated financial reports, the evaluation of the competition, and the evaluation of the credibility of the management. It requires time and skills to carry out these activities. The cognitive cost alone is even estimated at US$ fifty in time value. Assuming that the prospective value of US 10 is

[60] Lalley and Weyl (n 97) 35; Fritsch and others (n 94) 7–8; Paul L Davies and Sarah Worthington, Gower: Principles of Modern Company Law (10th edn, Sweet and Maxwell 2016) 456–58.
[61] David Yermack, '*Corporate Governance and Blockchains'*, 21 Rev. Fin. 7, 16–18 (2017).
[62] Frank H Easterbrook and Daniel R Fischel, *The Economic Structure of Corporate Law* (Harvard University Press 1991) 66–67.
[63] Easterbrook and Fischel (n 62).
[64] Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Harvard University Press 1965) 165–67.

INDRAPRASTHA LAW REVIEW

equal to the indisputable thinking cost of US 50, the rational investor will decide not to vote. Even with blockchain infrastructure potentially cutting transaction expenses, the cognitive cost has stayed constant, and the numerical evaluation still proceeds to positively support abstinence.

This cost-benefit analysis also becomes worse as the complexity of proposals increases. Technical issues, including capital structure, executive compensation plan, transactions between related parties, and merger conditions, are often matters of corporate governance.[65] Financial literacy and expertise in specific areas of the industry required to have a proper understanding of these topics are usually not the case with retail investors.[66] A shareholder needs to spend considerable resources to gather information, compile financial statements, and make informed judgments.[67] The studies have validated the inhibitory effect of such mental burdens on participation.[68] Blockchain does not help to alleviate these expenses. A storage on a distributed ledger does not make a complex merger agreement any more understandable. There is limited substantive value in transparency that lacks understanding.[69]

The asymmetry of information only complicates the situation. Controlling shareholders and management have an even better knowledge of the affairs of the company, strategic options, and the consequences of actions proposed.[70] They prepare plans, stipulate when to disclose, and cast problems in a way they would suit their own interests. This informational disadvantage is faced by retail investors regardless of the voting medium. Blockchain does not equalise information, even though it records it.[71] The greatest obstacle is not the way to vote but what to vote on. A minority shareholder looking at a blockchain-recorded proposal of a related party transaction still has the same question: Is the price fair? Are there any alternative options? Will this sale hurt me as a controller? To answer these queries, the investor needs information and knowledge that is not available to him. The distributed ledger does not help in this aspect.[72]

Finally, the mathematics of futility ensures an increase in indifference. Every investor realizes that her vote will not have an impact. Her voting power is 0.001%, so her vote will only have power when the vote is nearly even, which is hardly a possibility. The studies show that despite

---

[65] Bernard S. Black, '*Shareholder Passivity Reexamined'*, 89 Mich. L. Rev, 520, 523–24 (1990).
[66] Jill E. Fisch, '*Standing Voting Instructions: Empowering the Passive Investor'*, (2005) 154 U. Pa. L. Rev, 113, 123–25.
[67] Fisch (n 66) 24.
[68] Peter Iliev & Michelle Lowry, '*Are Mutual Funds Active Voters?'* (2015) 28 Rev. Fin. Stu, 446, 453–55.
[69] Chris Brummer, '*Disclosure, Dapps and DeFi'* (2019) 2 Stan J Blockchain L and Pol'y 137, 150–52.
[70] Michael C Jensen and William H Meckling, '*Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure'* (1976) 3 J. Fin. Econ, 305, 308.
[71] Lucian Arye Bebchuk, *The Case for Increasing Shareholder Power* (2005) 118 Harv. L. Rev., 833, 844–46.
[72] Primavera De Filippi and Aaron Wright, *Blockchain and the Law: The Rule of Code* (2018) 74–76.

INDRAPRASTHA LAW REVIEW

her spending all her time and resources in getting ready to vote, she cannot influence the vote. This makes participation cost economically irrational.[73] Blockchain does not change this assumption. Regardless of the method of registering the votes on paper, electronic or distributed ledgers, the minority holding the votes has no effect. This means that the motivation to engage will be practically non-existent, and the technology will not be able to address a motivational issue based on the insignificance of the economy.

The Disconnect Between Existing Legal Structures and Blockchain Implementation

The blockchain technology works within current legal systems that put structural restrictions on participation, regardless of the medium of voting. These are legal bottlenecks, which are stronger determiners of the results of governance than any technical system. The argument that the blockchain will democratise corporate control overlooks this basic rule of law determinism. For instance, most jurisdictions have limits on the number of shareholders that a proxy holder may represent. The Companies Act 2013, as an example, has restricted proxy to 50 shareholders.[74] This limit aims at deterring the concentration of votes but introduces an artificial inhibition to retail involvement. Small shareholders who cannot come to meetings have to find proxy holders who would represent them within the legal limit. Blockchain does not get rid of this barrier. Proxy arrangements can be made in a distributed ledger, and they can be used to check voting authority, but the 50-shareholder limit has to be enforced. The bottleneck is not technical, but it is legal. Application of blockchain voting in this regard will just digitise the constraint without eliminating it.[75]

Another legal barrier is quorum requirements. Company law normally provides for a minimum participation to be able to vote.[76] If a company requires a 30 per cent quorum and only 15 per cent of the shares turn up to vote, the meeting does not occur, irrespective of the manner in which the votes are cast and counted. Blockchain can certify 15 percent turnout and certify that the 15 percent has been counted correctly, but it cannot create the lacking 15 percent needed to reach a quorum. The rational apathy issue allows the retail shareholders to remain non-voting regardless of voting on paper, electronic systems, or blockchain.

Voting timeline limitations that cannot be completely done away with by blockchain. Corporate laws and securities rules impose tight timelines within which proxy votes should be cast. The purpose of such a timeline is to check the eligibility of their voters, total votes, and set up

[73] Anthony Downs, *An Economic Theory of Democracy* (1957) 244–46, 260–76.
[74] *Companies Act 2013*, s 105; Companies (Management and Administration) Rules 2014, r 19(2).
[75] Lafarre and Van der Elst (n 10) 61–63.
[76] *Companies Act 2013*, s 103.

INDRAPRASTHA LAW REVIEW

findings.[77] The disconnection between the technology and the legal empowerment is highlighted through the enforcement mechanisms. When there is manipulation of votes due to the existence of the controlling shareholders or violations of fiduciary duties due to the management, a judicial remedy is required.[78] Traditional corporate law provides enforcement of regulation, whereas blockchain fails to provide such solutions. While blockchain will be able to confirm a vote has been cast and verify the tally, it cannot limit the cases of unfairness.[79]

Dilemmas in enforcement are increased by jurisdictional ambiguity. In traditional corporations, there are specific jurisdictions and legal structures.[80] The shareholders know the courts have power and the legal regimes. Blockchain systems, on the other hand, can be cross-border with no legal certainty.[81] The token holders are unable to know which jurisdiction to determine what their rights are, and where they can seek redress in case of a failure of the governance. Such a loophole makes the minorities more susceptible than the traditional corporate setups. At least in the current state of blockchain voting, these solutions only digitize existing issues, but do not address them.

The doctrinal analysis reveals a further dimension that the technological optimism literature largely ignores: the business judgment rule. Under both Delaware corporate law and its Indian analogue in s 166 of the Companies Act 2013, directors' decisions are presumed to be made on an informed basis, in good faith, and in the honest belief that the action is in the best interests of the company. In Smith v Van Gorkom, the Delaware Supreme Court held that directors who approved a merger without adequately informing themselves of the company's intrinsic value had breached their duty of care, notwithstanding the absence of self-dealing. The significance of this ruling for present purposes is that blockchain technology is incapable of addressing the structural informational advantage that management possesses in framing proposals for shareholder vote. Even if a proposal is perfectly recorded on an immutable ledger, the question of whether the underlying transaction serves minority interests requires precisely the kind of substantive independent analysis that blockchain provides no mechanism to supply.[82]

The Indian legislative framework makes this gap especially pronounced. Sections 241 and 242 of the Companies Act 2013 confer on the National Company Law Tribunal the power to grant

[77] *Companies Act 2013*, s 91; Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations 2015, reg 42.
[78] *Companies Act 2013*, ss 241–242.
[79] *Schnell v Chris-Craft Industries Inc,* 285 A 2d 437, 439 (Del 1971).
[80] *Companies Act 2013*, s 9.
[81] *Companies Act 2013*, s 430.
[82] Smith v Van Gorkom 488 A 2d 858 (Del 1985); Umakanth Varottil, 'India's Experimentation with the Business Judgment Rule' (2020) 20 Oxford University Commonwealth Law Journal 53, 60–65.

INDRAPRASTHA LAW REVIEW

relief in cases of oppression and mismanagement. The statutory standard requires that the affairs of the company have been conducted in a manner that is prejudicial to public interest, or prejudicial or oppressive to any member or members. In Cyrus Investments P Ltd v Tata Sons Ltd, the National Company Law Appellate Tribunal engaged in a detailed examination of the standard of prejudice required under s 241, clarifying that oppression connotes a visible departure from the standards of fair dealing and a violation of the conditions of fair play on which every shareholder who entrusts his affairs to a company is entitled to rely. Blockchain records are, self-evidently, incapable of satisfying the evidentiary and analytical demands of this inquiry. A distributed ledger can confirm that a vote occurred and was accurately tallied; it cannot establish that the conduct of the controlling shareholder in procuring that vote was oppressive within the s 241 standard, nor can it provide the independent assessment of corporate fairness that the Tribunal requires before intervening.[83] The statutory remedies available to minority shareholders are therefore structurally decoupled from any voting mechanism, blockchain or otherwise. Their effectiveness depends on the substantive quality of judicial reasoning and the accessibility of litigation — factors that legal reform, not technological deployment, can meaningfully address.

VII. PILOT STUDIES: DESIGN, IMPLEMENTATION, AND ASSESSMENT

A serious analysis of blockchain-based corporate voting pilot projects reveals that is not the altruistic arguments they argue, but the glaring lack of empirical studies. Projects like National Settlement Depository Russia (2016), Nasdaq Estonia, the Broadridge/JPMorgan/Santander partnership, and the Voteroom application by KAS Bank, none of these pilots have published verifiable data that proves tangible improvement of corporate democratic governance.[84] Such an evidentiary vacuum stands out especially, given the fact that these pilots engaged highly sophisticated financial institutions that had powerful data-collection technologies and were used in parallel with conventional voting mechanisms, thus making it the best case of comparative analysis.[85]

Pilot National Settlement Depository (2016), which investigated blockchain-enabled e-proxy voting of shareholder meetings[86]. Although the IT Director at NSD boasted about the ability of the system to process up to 800 transactions per second. Subsequent reports conspicuously fail

[83] Cyrus Investments P Ltd v Tata Sons Ltd [2017] 194 CompCas 211 (NCLAT); Companies Act 2013, ss 241–242; Shanti Prasad Jain v Kalinga Tubes Ltd AIR 1965 SC 1535; Elder v Elder and Watson Ltd [1952] SC 49.
[84] Lafarre and Van der Elst (n 1).
[85] Lafarre and Van der Elst (n 1).
[86] National Settlement Depository, 'NSD Successfully Tested an E-proxy Voting Prototype Running on Blockchain' (Press Release, 25 May 2016).

INDRAPRASTHA LAW REVIEW

to disclose any data on whether the rates of shareholder participation had increased or whether the accuracy had improved compared to the conventional tabulation.[87]

The Estonia project of Nasdaq took the same path. Following the declaration of the trial as a success in January 2017, Nasdaq released no empirical evidence that would answer the basic questions: How many e-Residents actually voted with the blockchain platform, as opposed to the traditional proxy methods? Were the rates of attendance by the remote shareholders improved? How many error or disagreement rates were there versus normal voting? There are no statistics that indicate that the pilot stimulated such deployment on a large scale.[88]

The case of Broadridge/JPMorgan/Santander partnership is perhaps another case of data silence. Despite running a parallel blockchain voting pilot project, none of these organizations openly published data analysis.[89] Similarly, Santander used blockchain for its 2018 AGM; they reported shareholder numbers but provided no baseline for comparison.[90] It remains unknown if participation increased or decreased. The missing data suggests participation results may not have been significant. If the pilots had revolutionized minority participation, it would likely have publicized this positive news.[91]

VIII. NON-TECHNOLOGICAL REFORMS: ALTERNATIVE APPROACHES TO ELECTORAL IMPROVEMENT

The desired minority shareholder participation is unlikely be achieved through technological solutions, but legal and structural ones. The engagement barriers include the economic, informational, and legal barriers, which blockchain may not resolve. Corporate governance studies illustrate that the protection of minority interests depends on the minimization of information costs, the removal of legal bottlenecks, and mechanisms enhancement that increase the voice of a minority group.[92]

Enhancing Transparency Through Plain Language Disclosure Requirements

The cognitive load of deciphering the complicated proposals is the main barrier to informed voting. Securities laws compel disclosure, but corporations are fulfilling this requirement with

[87] National Settlement Depository (n 86).
[88] Lafarre and Van der Elst (n 1) 24–25.
[89] '*Proxy Voting on a Private Blockchain Infrastructure: A Case Study'* (Broadridge Financial Solutions 2017) 4–6.
[90] Banco Santander and Broadridge Financial Solutions, 'Santander and Broadridge Complete a First Practical Use of Blockchain for Investor Voting at an Annual General Meeting' (Press Release, 17 May 2018).
[91] Lafarre and Van der Elst (n 1) 26.
[92] Bernard S Black, 'Shareholder Passivity Reexamined' (1990) 89 Mich L Rev, 520, 523–24.

INDRAPRASTHA LAW REVIEW

massively technical filings that are meaningless to ordinary investors. Cognitive costs have been proven to be more discouraging to participation than transaction costs. [93]

All shareholder proposals should be summarized in plain language, which regulators should insist upon. These briefs should articulate clearly what the shareholders will be voting on, the possible outcome of the proposal to the company value, and how it will impact the interests of the minority. The evidence on financial literacy supports that plain disclosure encourages understanding and active participation of retail investors.[94]

This reform is also supported through independent analysis. The disclosures and presentation of proposals are regulated by companies so that they can benefit management and controlling shareholders. To identify whether the proposals benefit minority holders or not, a neutral assessment is necessary. This practice will bring a level of information parity between insiders and retail holders, thus subduing asymmetry of rational apathy.

Reforms to Proxy Voting Infrastructure

Laws restricting voting by proxies create artificial obstacles to voting. The Indian Companies Act which limit the proxy representation upto 50 shareholders.[95] The minorities can no longer combine voting power, which restricts their ability to vote. Removing this cap would allow minority stockholders to form economies of scale. A proxy representing 500 small shareholders could justify the cognitive costs of scrutinizing suggestions.[96] Studies reveal that the level of participation in voting is inversely correlated with procedural barriers, regardless of economic incentives.[97]

Implementing Compulsory Cumulative Voting Rights

Cumulative voting allows the shareholders to place their votes on the particular candidates of directors instead of allocating them to all the positions. This mechanism increases the representation of minorities in boards by permitting concentrated voting power. The empirical evidence demonstrates that it will increase the board diversity and monitoring of the management.[98]

[93] Troy A Paredes, 'Blinded by the Light: Information Overload and Its Consequences for Securities Regulation' (2003) 81 Wash U L Q 417, 434–40.
[94] *Securities Act of 1933*, r 421(d) (17 CFR s 230.421(d)).
[95] *Companies (Management and Administration) Rules 2014*, r 19(2).
[96] Sanford J Grossman and Oliver D Hart, 'Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation' (1980) 11 Bell J Econ 42, 53–54.
[97] Yair Listokin, 'Management Always Wins the Close Ones' (2008) 10 Am L & Econ Rev 159, 175–78.
[98] Jeffrey N Gordon, 'Institutions as Relational Investors: A New Look at Cumulative Voting' (1994) 94 Colum L Rev, 124, 142–46.

INDRAPRASTHA LAW REVIEW

For example, a shareholder with 100 shares voting on five positions could cast all 500 votes for one candidate. The shareholder is likely to elect the candidate significantly because by diverting all the 500 votes into one of the candidates, he/she would be likely to succeed. The collective action of minority holders can also be used to elect at least one director if the controllers have majority stakes in the company, thereby giving the minorities a representation on the board of control and access to the information in a manner that they would not have.

The law should make provisions for cumulative voting. Studies suggest that optional cumulative voting is scarcely utilized, and companies shun it specifically because it provides the power to minorities.[99] Compulsory enforcement will make sure that the reform is of a material manner that makes governance change and not nominal.

Strengthened Fiduciary Enforcement and Judicial Accessibility

The three reforms discussed above address information costs, collective action barriers, and representation structure. A fourth strand of reform is required to address enforcement. The existing minority shareholder remedies under the Companies Act 2013 — derivative actions under s 245, oppression and mismanagement petitions under ss 241–242, and class action suits — are theoretically comprehensive but practically inaccessible to retail investors. The cost of NCLT proceedings, the length of litigation, and the requirement to establish legal standing through minimum shareholding thresholds under s 244 effectively reserve judicial remedies for institutional minority holders.[100]

A structured reform would involve three elements. First, SEBI should be empowered to bring representative enforcement actions on behalf of classes of minority shareholders, analogous to the SEC's authority under ss 10(b) and 21(d) of the Securities Exchange Act 1934 in the United States. This would shift the cost of enforcement from individual shareholders to the regulatory body, overcoming the rational apathy problem that makes private litigation impracticable. Second, minimum shareholding thresholds for standing to bring oppression petitions under s 244 should be reduced or replaced with a numerical threshold (for example, one hundred shareholders, regardless of their aggregate holding) to ensure that dispersed retail holders are not automatically excluded. Third, the Companies Act 2013 should be amended to impose a duty on audit committees to provide an independent fairness opinion on all related party

[99] Gordon (n 98).

[100] Companies Act 2013, ss 241–242, 244, 245; Afra Afsharipour, 'Diversity in the Boardroom: Comparing Indian and US Approaches' (2020) 21 Theoretical Inquiries in Law, 91, 118–20; Securities Exchange Act 1934 (US), ss 10(b), 21(d).

INDRAPRASTHA LAW REVIEW

transactions above a prescribed threshold, with such opinions to be made available to shareholders in plain language before the relevant vote.[101]

IX. COMPARATIVE PERSPECTIVES AND IMPLEMENTATION FRAMEWORKS

Comparative corporate law provides both cautionary evidence and workable implementation models. The European Union's Shareholder Rights Directive II (Directive 2017/828/EU) represents the most comprehensive legislative attempt to address minority shareholder participation in listed companies. It mandates that listed companies facilitate electronic participation and voting at general meetings, imposes transparency requirements on proxy advisors, and requires member state laws to ensure that shareholders can identify the holders of their shares across the custody chain. These requirements directly address several of the intermediation failures that blockchain proponents seek to solve through technological means — and do so through binding legal obligation rather than technological substitution.[102]

The United Kingdom's experience with say-on-pay legislation under s 439 of the Companies Act 2006 provides empirical evidence of the effect of mandatory voting rights on executive pay outcomes. Following the introduction of binding shareholder votes on remuneration policy in 2013, the proportion of FTSE 100 companies receiving significant (over 20%) shareholder opposition on remuneration increased substantially, demonstrating that legal empowerment of minority voice — not voting technology — drives governance outcomes. In South Korea, Art 382-2 of the Commercial Act mandates cumulative voting for companies with paid-in capital above a prescribed threshold, and empirical studies have found that companies subject to mandatory cumulative voting exhibit better minority shareholder protection indices and lower tunnelling rates than comparable companies in jurisdictions without such requirements.[103] These international comparators support the conclusion that substantive legal mandates, not technological platforms, are the primary determinants of minority shareholder empowerment.

For India specifically, an integrated implementation framework would involve the following sequenced reforms. In the immediate term, SEBI should issue a circular under its existing

[101] Basic Inc v Levinson 485 US 224 (1988); Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations 2015, reg 23 (as amended 2018); Companies Act 2006 (UK), s 994.

[102] European Parliament and Council Directive 2017/828/EU of 17 May 2017 amending Directive 2007/36/EC as regards the encouragement of long-term shareholder engagement [2017] OJ L132/1, arts 3a–3c, 9a–9b; for analysis, Luca Enriques and others, 'Related Party Transactions' in Reinier Kraakman and others (eds), The Anatomy of Corporate Law (3rd edn, OUP 2017) 147, 161–63.

[103] Companies Act 2006 (UK), s 439; Fabrizio Ferri and David Maber, 'Say on Pay Votes and Chief Executive Officer Compensation: Evidence from the United Kingdom' (2013) 17 Review of Finance 527, 530–35; Korean Commercial Act, art 382-2; Joongi Kim, 'Corporate Governance in Korea and the Asian Financial Crisis' (2005) 5 Journal of Korean Law 1, 18–21.

INDRAPRASTHA LAW REVIEW

powers requiring all listed entities to provide a plain-language summary of not more than 500 words for each material resolution, alongside any statutory explanatory statement. In the medium term, the Companies Act 2013 should be amended to remove the 50-proxy limit under s 105(1), replacing it with a requirement that proxy holders disclose the identity of represented shareholders to the company prior to the vote. In the long term, cumulative voting should be made mandatory for board elections in listed companies with a free-float exceeding a specified threshold, with the mechanism operationalised through electronic voting platforms already mandated by SEBI Circular SEBI/HO/CFD/CMD/CIR/P/2020/179. Blockchain technology may appropriately serve as the verification and audit layer for this expanded electronic voting infrastructure, provided it operates within the legal framework rather than as a substitute for it.[104]

X. CONCLUSION

This paper has demonstrated that blockchain technology, despite its technical merits, cannot resolve the structural, legal, and economic barriers that drive minority shareholder disengagement. The foregoing analysis establishes that blockchain's promise of transparency fails to address rational apathy born of infinitesimal voting power, the cognitive costs of evaluating complex proposals, entrenched information asymmetries, and the legal bottlenecks that continue to constrain meaningful participation regardless of the voting medium employed. The conspicuous lack of participation data from various pilot projects implies that there were no revolutionary outcomes. Blockchain demonstrated infrastructure feasibility but left unchanged the underlying economics and legal frameworks that determine governance outcomes. By contrast, conventional digital voting mechanisms deployed in Israel and France generated measurable increases in shareholder participation — evidence that sits more appropriately alongside the empirical analysis of pilot studies above, where it is addressed. The pilot data considered in this paper consistently supports the same conclusion.[105] It suggests that it is not the record-keeping technology that was the problem, but rather the cognitive costs, legal bottlenecks, and power disparities that blockchain does not fully address.

The path forward lies in substantive legal reform rather than technological substitution. Mandatory plain-language disclosure requirements to reduce cognitive barriers, removal of arbitrary proxy representation caps to enable collective action by dispersed shareholders,

[104] Securities and Exchange Board of India, Circular No SEBI/HO/CFD/CMD/CIR/P/2020/179 (1 October 2020); Exchange Act Rule 14a-16 (notice and access model); Companies Act 2013, s 105(1).

[105] Autorité des Marchés Financiers, '*Report on Shareholder Activism'* (2011) 15–20; Assaf Hamdani and Yishay Yafeh, 'Institutional Investors as Minority Shareholders' (2013) 17 Rev Fin, 691, 715–18.

INDRAPRASTHA LAW REVIEW

compulsory cumulative voting, and strengthened fiduciary enforcement mechanisms collectively address the root causes of minority marginalisation — information disadvantage, economic irrationality of individual participation, and structural exclusion. Blockchain may serve a facilitative function within such a reformed framework, but only once one acknowledges the foundational truth that shareholder democracy is constructed through law and economic incentive structures, not cryptographic protocols.

INDRAPRASTHA LAW REVIEW

RETHINKING TESTIMONIAL COMPULSION: ARTICLE 20(3) IN THE ERA OF ENCRYPTION

- Hritwik Ravi*
- Sudhanshu Tyagi**

ABSTRACT

India's widespread use of encrypted personal electronic devices has raised serious constitutional problems, which it intersects with the domain of criminal justice system. It opposes the state's investigative powers and the fundamental right against self-incrimination guaranteed by Article 20(3) of the Constitution. This issue is made worse by new criminal laws that mainly rely on digital evidence. Indian courts have issued conflicting decisions about whether requiring an accused individual to provide a password, PIN, or biometric information in order to access a device violates this right. The Karnataka High Court ruled in the Virendra Khanna case that it isn't, drawing a comparison to the presentation of tangible, non-testimonial evidence like fingerprints. On the other hand, in CBI v. Mahesh Kumar Sharma, a Delhi CBI Court determined that this was an unconstitutional testimonial act for passwords, which necessitates disclosing private information. The provided analyses argue that both passwords and biometrics, when used for decryption, are functionally equivalent testimonial acts. Thus, compelling an individual to unlock their device forces them to communicate possession, control, and authenticate the data within, thus actively participating in their own incrimination.

Keywords: Compelled Decryption, Right Against Self-Incrimination, Digital Evidence, Privacy and Constitutional Rights, Biometric and Password Authentication

I. INTRODUCTION

India is going through a massive digital transformation that has changed how people live and connect. In the last decade, the use of technology has grown so rapidly that being online is now an essential part of everyday life. Smartphones are driving this change. India has become one of the largest mobile-first societies in the world.[1] As a result, personal devices like smartphones and laptops have become central to people's lives. They store private messages, photos, financial records, health data, location history, political opinions, and personal thoughts. These devices now represent digital versions of their owners.[2] Thy are dynamic in nature, as "always-in-use devices".[3]

However, this has also created a new kind of tension. The state encouraged people to rely on digital platforms, for all good reasons, now it often seeks access to the information stored on these devices. The surge in cybercrimes, which rose from 10.29 lakh incidents in 2022 to 22.68 lakh in 2024, has intensified the state's demand for access to encrypted data. Investigating

* Research Scholar and Junior Research Fellow, Indian Law Institute, New Delhi.
** Advocate, Supreme Court of India.

[1] 'India to have over 900 million internet users in 2025' *The Economic Times* (16 January 2025).

[2] Eric Durnell, Karynna Okabe and others, 'Online Privacy Breaches, Offline Consequences: Construction and Validation of the Concerns with the Protection of Informational Privacy Scale' (2020) 36(19) *International Journal of Human-Computer Interaction* 1834.

[3] Bryan H Choi, 'The Privilege Against Cellphone Incrimination' (2019) 97 Texas Law Review 75.

INDRAPRASTHA LAW REVIEW

agencies argue that encryption creates "warrant-proof" zones that hinder the administration of justice, effectively shielding criminals who use secure platforms to orchestrate offenses ranging from financial fraud to terrorism.

This issue is intensified by a recent reorientation of India's criminal justice framework.[4] The new triumvirate of criminal laws, places an unprecedented reliance on digital evidence. The Bharatiya Sakshya Adhiniyam (BSA), 2023, clarifies that the term "document" encompasses any matter expressed or described on any substance, including information stored on any "electronic record."[5] This explicitly covers data on hard drives, smartphones, servers, and other digital storage media. The silence of the new statutes on the specific issue of compelled decryption leaves a dangerous vacuum, one currently being filled by contradictory judicial interpretations that oscillate between protecting civil liberties and prioritizing investigative expediency.

The Right against Self- Incrimination

Art. 20(3) of the Constitution of India states that, no person accused of any offence shall be compelled to be a witness against himself.[6] It embodies three essential requirements:

1. The individual providing the testimony must hold the status of an accused at the time it is made.[7]
2. The testimony must have a direct and material connection to the accused's own criminal liability.
3. The testimony must have been obtained through compulsion.

This legal protection granted to an accused person against nefarious investigation practices and ensures that the prosecution discharges its burden of proving the offence as per the standard requirements, i.e., beyond reasonable doubt.

The scope of art. 20(3) was first examined in *M.P. Sharma* v. *Satish Chandra*,[8] where the Supreme Court held that the expression *to be a witness* under art. 20(3) is equivalent to furnishing evidence. The Court adopted a broad interpretation, extending the protection to oral statements, production of documents, and even intelligible gestures.

[4] India reoriented its criminal laws by replacing the colonial-era Indian Penal Code (IPC), Code of Criminal Procedure (CrPC), and Indian Evidence Act (IEA) with three new laws: the Bharatiya Nyaya Sanhita (BNS), the Bharatiya Nagarik Suraksha Sanhita (BNSS), and the Bharatiya Sakshya Adhiniyam (BSA), all effective from July 1, 2024.

[5] Bharatiya Sakshya Adhiniyam 2023 (Act No 47 of 2023) s 2(d).

[6] Constitution of India, art 20(3).

[7] A 'person accused of an offence' here is understood as any person against whom a statement of charges in any way, shape, or form, has been filed before a judicial authority who has the legal authority to decide as to whether or not the accused should be prosecuted or not.

[8] AIR 1954 SC 300.

INDRAPRASTHA LAW REVIEW

It observed that evidence may be furnished through speech, production of documents or objects, or any other voluntary act, and that every such positive act constitutes testimony. Art. 20(3), therefore, safeguards individuals against "testimonial compulsion," meaning coercion in obtaining such voluntary evidentiary acts.

The Court also upheld the State's statutory powers of search and seizure, reasoning that the Indian Constitution did not at the time recognize a fundamental right to privacy. This position on privacy was later overruled in *K.S. Puttaswamy* v. *Union of India*;[9] however, the ruling upholding the validity of search and seizure remains intact. The expansive interpretation of art. 20(3) in *Satish Chandra* raised concerns that its scope had been stated too broadly, which prompted the constitution of a larger Bench in *State of Bombay* v. *Kathi Kalu Oghad*,[10] to re-examine its limits, which will be discussed later.

Article 20(3) in the Age of Encryption

The distinction established in *Kathi Kalu Oghad*, between the contents of the mind and the attributes of the body, is facing an existential challenge in the age of encryption. Strong encryption standards like AES-256, which make data mathematically unreadable without the right decryption key (passcode) or biometric authentication, safeguard modern devices. An encrypted device is not vulnerable to physical force and requires the user's cooperation, unlike physical lockbox.

The investigative agencies cannot just seize the evidence; instead, they must force the user to either use their body to grant access or reconstruct the key from memory. This, on the face of it seems to be violative of the protections of article. It changes the focus of the investigation from looking for tangible items to probing the accused's mind.

To begin with, it has to be noted that the vast majority of smartphones and other personal devices are now encrypted by default. This automatically protects user data from unauthorized access. The user awareness of the technical specifics of encryption may be low but its default implementation by manufacturers has made it a near-universal barrier for law enforcement.[11] Therefore, it is necessary for the accused to actively participate in order to access the data on these devices. He must supply a biometric identifier (face scan or fingerprint), password, or PIN.

[9] (2017) 10 SCC 1.
[10] (1961) 2 SCR 125.
[11] Some devices don't function without ensuring Encryption.

INDRAPRASTHA LAW REVIEW

Recently, the Karnataka High Court in *Virendra Khanna* case,[12] and the Kerala High Court in *P. Gopalakrishnan alias Dileep* case,[13] have held that data and information on an accused person's electronic device can be accessed by the prosecution and that the accused person shall have to provide the password/passcode/biometric access to unlock such electronic device. Thus, the production of the electronic device and password / passcodes / biometrics is not violative of art. 20(3) of the Constitution.

The author respectfully departs from this reasoning and contends that passwords, biometrics, and passcodes fall squarely within the protection guaranteed by art. 20(3) of the Constitution. Consequently, this paper will argue that compelling an individual to provide a password, PIN, or biometric data to unlock a personal electronic device is a quintessential testimonial act that falls within the protection of art. 20(3), as interpreted through the foundational doctrines of *Kathi Kalu Oghad* case and, more significantly, the modern principles articulated in *Selvi* case.[14] It will further contend that the current judicial landscape, has created a state of constitutional uncertainty that is untenable and requires definitive resolution.

II. EVOLUTION OF THE *RIGHT* AGAINST SELF-INCRIMINATION IN INDIA

The right to silence and the privilege against self-incrimination have deep historical roots, emerging as a reaction against the inquisitorial excesses of the English legal system. The *ex officio* oath was a procedure created by the English Courts of Star Chamber and High Commission that required accused to take an oath.[15] Even before a formal charge was filed under this procedure, an accused individual had to respond to questioning from judges and prosecutors. Torture could result from refusing to take the oath. The Star Chamber and the High Commission were finally abolished as a result of these repressive actions. The legal precept *nemo debet prodere ipsum*, which states that 'no one is bound to betray himself,' later gave rise to the right to remain silent and served as the foundation for the privilege against self-incrimination.[16]

This idea is safeguarded by the Indian Constitution. The Indian Constitution's art. 21 protects the right to life and personal liberty, whereas art. 20(3) ensures the basic right against self-incrimination, ensuring that no one can be deprived of liberty except through a fair legal

[12] *Virendra Khanna v State of Karnataka* 2021 SCC OnLine Kar 5032.
[13] *P Gopalakrishnan alias Dileep v State of Kerala* (2020) 9 SCC 161.
[14] *Selvi v State of Karnataka* (2010) 7 SCC 263.
[15] John H Langbein, 'The Historical Origins of the Privilege Against Self-incrimination at Common Law' (1993) 92 Michigan Law Review 1047.
[16] Langbein (n 15) 1071.

INDRAPRASTHA LAW REVIEW

process. During the Constituent Assembly debates in December 1948, a crucial amendment,[17] was proposed for what was then draft art. 14 (which became art. 20). On December 3, 1948, Kazi Syed Karimuddin moved to insert a new clause that was textually identical to the Fourth Amendment of the U.S. Constitution,[18] which protects against unreasonable searches and seizures. He argued for this amendment by citing widespread arrests and searches based on mere suspicion in 1947 and 1948. Dr. B. R. Ambedkar, the architect of the Indian Constitution, supported the amendment. He called it a "useful provision," noting that its principles were already present in the Criminal Procedure Code. He believed these protections were so vital for personal liberty that they should be placed beyond the reach of future legislatures by elevating them to a fundamental right. Even though the amendment failed, Dr. Ambedkar's observations survive. His view was that protections equivalent to the Fourth Amendment were already available in statutory law and that these should be given a superior status as a fundamental right. Let's have a look at these statutory protections.

Statutory Framework: The Code and the Constitution

The constitutional guarantee of Article 20(3) is operationalized through various statutory provisions in India's criminal procedure codes. According to S. 195 of the Bhartiya Nagarik Suraksha Sanhita (BNSS), a person being questioned by the police must answer honestly, but they are free to decline to answer questions that could result in criminal charges, fines, or forfeiture.[19]

Similarly, s. 351 protects the right to silence during trial

> "The accused shall not render himself liable to punishment by refusing to answer such questions, or by giving false answers to them."[20]

Further, s. 353 ensures that neither the prosecution, the defence, nor the court can comment on an accused person's choice to remain silent or refuse to testify. It states

> "His failure to give evidence shall not be made the subject of any comment by any of the parties or the court or give rise to any presumption against himself or any person charged together with him at the same trial."[21]

[17] Constituent Assembly Debates (3 December 1948) <https://www.constitutionofindia.net/debates/03-dec-1948/#92960 >accessed 1 October 2025.
[18] The Fourth Amendment protects people and their property from unreasonable searches and seizures. It requires warrants to be based on probable cause and to clearly specify what and where may be searched or seized.
[19] Bharatiya Nagarik Suraksha Sanhita 2023 (Act 46 of 2023) s 195.
[20] BNSS (n 19) s 351(3).
[21] BNSS (n 19) s 353(1)(b).

INDRAPRASTHA LAW REVIEW

Together, Ss. 181, 351, and 353 protect the right to remain silent during the investigation and trial phases, maintain the assumption of innocence, and prohibit any negative inference from being made from the accused's silence.

The earlier Criminal Procedure Code of 1898 had similar but less consistent provisions. S. 342A, added in 1955, allowed an accused to testify on their own behalf and prohibited comments on their failure to do so.[22] However, S. 342(2) of the same Code contradicted this by permitting the court or jury to draw inferences from an accused's silence.

> The accused shall not render himself liable to punishment by refusing to answer questions or by giving false answers to them; but the court and the jury (if any) may draw such inference from such refusal or answers as it thinks fit.[23]

This contradiction was resolved when the 1973 Code replaced the old provision. The clause allowing adverse inferences from silence was omitted, aligning the law with art. 20(3) of the Constitution, which had come into effect in 1950 and firmly guaranteed protection against self-incrimination.

The 'Right' and the 'Privilege' Distinguished

A key development in the history of the Fifth Amendment to the US Constitution was the evolution from a 'privilege' to a 'right' against self-incrimination. A 'right' implies a corresponding 'duty'. The Fifth Amendment does not confer a general 'right to silence' which would create a corresponding duty on the police not to ask incriminating questions. Instead, it protects the 'right not to be compelled to be a witness against oneself'. This distinction is also applicable to art. 20(3).[24] In the past, people in England were shielded from being questioned without a formal charge based on adequate reason by the privilege against self-incrimination. However, the accused can be forced to testify under oath when a valid charge was brought. This developed into a 'right' to be exempt from forced self-incrimination during a trial in the late 17th century, unless the accused was questioned.

The Nandini Satpathy and Selvi Shift

The interpretation of 'compulsion' was significantly broadened in *Nandini Satpathy* v. *P.L. Dani* (1978). The Supreme Court recognized that compulsion is not limited to physical torture ("third-degree" methods) but extends to psychological pressure and "atmospheric" coercion

[22] Law Commission of India, *Report on Article 20(3) of the Constitution of India and the Right to Silence* (May 2002).
[23] Law Commission of India (n 22) 42.
[24] Khagesh Gautam, *The Right Against Self-Incrimination Under the Indian Constitution and the Admissibility of Custodial Statements Under the Evidence Act 1872* (unpublished thesis, Indiana University 2021).

INDRAPRASTHA LAW REVIEW

inherent in custodial interrogation. Justice Krishna Iyer observed that the right against self-incrimination must be interpreted broadly to protect the accused from the "psychological third degree" utilized by sophisticated police forces. This ruling recognized that a suspect's will may be overpowered by the stress of being in police custody, potentially rendering any statement made therein involuntary. This path led to the landmark Selvi ruling, in which the Supreme Court considered the constitutionality of polygraph tests, narco-analysis, and Brain Electrical Activation Profiles (BEAP). According to the Court, forcing someone to take these tests is against art. 20(3) since it takes personal knowledge from their mind against their will. Importantly, the Court established the idea of mental privacy, holding that the sanctity of a person's mind is safeguarded by the prohibition against self-incrimination. The Court pointed out that even if the results of these tests are not directly incriminating, they may lead to the discovery of incriminating evidence , and it is unconstitutional to force the accused to give the information that leads to such discovery. Since passwords are only found in the mind, *Selvi* established that the zone of mental privacy is untouchable. This principle directly relates to the forced disclosure of passwords. The ruling essentially changed the emphasis from the extraction process to the type of information that was taken out; it is against art. 20(3) for the state to pry into someone's mind in order to obtain information that the accused is unwilling to divulge.

Thus, the right to silence, therefore, has multiple dimensions. It places the burden of proof on the State, ensures that an accused person is presumed innocent until proven guilty, and protects individuals from being forced to testify against themselves. However, there are certain exceptions. An accused may be compelled to cooperate with investigations in non-testimonial ways, such as giving fingerprints, blood or DNA samples, photographs, or voice recordings.[25] This principle is also recognized internationally. Art. 14(3)(g) of the International Covenant on Civil and Political Rights (ICCPR), 1966, to which India is a party, states that no one shall be compelled to testify against themselves or to confess guilt. This reflects a global commitment to the protection of human dignity and fair trial rights.

III. TESTIMONIAL COMPULSION AND DECRYPTION OF PERSONAL DEVICES

This issue pits the state's compelling interest in effective and fair investigation against an individual's fundamental rights to silence. The contents of a personal device can provide a direct link to a crime, reveal motives, establish connections between co-conspirators, or

[25] *Selvi* (n 14).

INDRAPRASTHA LAW REVIEW

exonerate the innocence. However, the very act of compelling disclosure of a password or the application of it, forces the accused to actively participate in the process of unearthing potentially incriminating evidence. As of now, the Supreme Court of India has not delivered an authoritative pronouncement on this specific issue, leaving the question *res integra.*

A distinction is made between testimonial and non-testimonial acts in relation to the right against self-incrimination.[26] A testimonial act, which is protected under art. 20(3) of the Constitution, involves imparting personal knowledge through oral or written statements and requires the use of the subject's mental faculties. The results of narco-analysis and polygraph tests are classified as testimonial because they derive knowledge from the subject's mind, unlike a simple physical examination. In contrast, non-testimonial acts involve the compulsory extraction of material or physical evidence, such as bodily substances like blood, semen, and hair samples, which lies outside the protective scope of art. 20(3).

Decryption as a Non-Testimonial Act?

In the case of *Virendra Khanna*,[27] the Karnataka High Court confronted this issue directly and ruled in favour of the investigating agencies. The court held that, compelling an accused to disclose a password or biometric does not violate art. 20(3). The accused refused to divulge his passwords, prompting the police to seek a court order compelling disclosure. The case involved allegations of drug peddling where digital evidence was pivotal to establishing the network of distribution.

The case arose from an investigation under the NDPS Act,[28] and the Foreigners Act, 1946. The police took the petitioner's mobile phone and laptop. They asked him to provide the passwords for both devices and his email account. When the petitioner refused, the police went to the trial court with two requests. One request was to conduct a polygraph test without his consent to find out the password. The other request was for a direct order to force him to reveal it. The trial court allowed both applications. The petitioner challenged these orders before the High Court, which overturned the order for the polygraph test but upheld the order compelling password disclosure.

The cornerstone of the High Court's reasoning was the long-standing distinction between testimonial and non-testimonial (or physical) evidence. To establish this, the court heavily relied on the landmark Supreme Court decision in *Kathi Kalu Oghad*.[29] In that case, the

[26] *Selvi* (n 14) [139].
[27] *Virendra Khanna* (n 12).
[28] Narcotic Drugs and Psychotropic Substances Act 1985 (Act No 61 of 1985).
[29] *Supra* note 10.

INDRAPRASTHA LAW REVIEW

Supreme Court had to determine whether compelling an accused to provide handwriting or thumb impression samples violated art. 20(3). The Court ruled that it did not, and created a crucial distinction. It held that *to be a witness* primarily means, imparting knowledge in respect of relevant facts, based on personal knowledge, either through oral or written statements. Self-incrimination, therefore, refers to "conveying information based upon the personal knowledge" of the accused. It does not extend to the, merely the mechanical process of producing documents in court, or providing physical evidence like fingerprints, which do not rely on the accused's personal knowledge of the facts of the case.

The Court concluded that a request for a password, passcode, or biometric did not constitute testimonial compulsion by applying this precedent. It contended that the accused is only giving a key to access data rather than responding to any query that would directly implicate them in crime. The revelation was compared to providing tangible proof like voice samples, thumb impressions, or fingerprints. The password was seen by the court as a tool rather than a statement. Once the device is unlocked, the investigating officer must find relevant data and show its link to the crime in court while following the rules of evidence. The court suggested that providing access alone does not count as self-incrimination. If this reasoning is followed to its logical end, it would essentially eliminate the right against self-incrimination.[30] Every piece of evidence, including a direct oral confession coerced from an accused, must be proven and established in court before the prosecution can rely upon it. The procedural requirement of proof at trial is entirely separate from the constitutional prohibition against compelling an individual to generate evidence against themselves at the investigative stage. The fact that evidence must later be proven does not sanitize an unconstitutional method of obtaining it in the first place.

Furthermore, the High Court interpreted provisions of the Code of Criminal Procedure (CrPC) to create a procedural basis for such compulsion. It held that

- A password or biometric could be treated as a "document" under Section 91 of the CrPC, which empowers a court or a police officer to issue an order for the production of any document necessary for an investigation.
- A search warrant under Section 93 of the CrPC could be issued for a smartphone or computer system, as the court interpreted the word "place" in the section to include

[30] Gautam Bhatia, 'Compelling an Accused to Unlock their Mobile Phones: A Critique of the Kerala and Karnataka High Court Judgments' (*Indian Constitutional Law and Philosophy*, 7 February 2022) <https://indconlawphil.wordpress.com/2022/02/07/the-kerala-high-court-rules-on-mobile-phone-data-and-the-right-against-self-incrimination-a-critique/ >accessed 20 September 2025.

INDRAPRASTHA LAW REVIEW

such devices.

- S. 100 of the CrPC, which mandates that a person in charge of a closed place must allow access to an officer executing a search warrant, could be extended to compel a person to unlock their electronic device.

In its final analysis, the court concluded that withholding a passcode would significantly impair investigations in a world where vast amounts of data are stored on personal devices. It held that the mechanisms within the CrPC provided sufficient legal justification for compelling disclosure, and such an order did not infringe upon the constitutional right against self-incrimination.

The Delhi Special CBI Court's Bifurcated Approach

In a contrasting judgment, a Special CBI Court in Delhi, in the case of *CBI* v. *Mahesh Kumar Sharma*,[31] took rights-oriented approach, creating a distinction between compelling the disclosure of passwords and compelling the use of biometrics. The prosecution moved an application seeking the disclosure of the passcode for a computer seized from the accused, relying on *Virendra Khanna*. The defense countered that compelling passcode disclosure was testimonial in nature, violated art. 20(3), and argued that the *Virendra Khanna* judgment was *per incuriam* (wrongly decided) in light of the Supreme Court's ruling in *Selvi*.[32]

The Delhi court acknowledged the wide investigative powers available to police under the CrPC but affirmed that these powers are subordinate to the constitutional guarantee against self-incrimination. The court's ruling bifurcated the issue into two distinct categories.

Firstly, the court ruled that forcing an accused to disclose a password or security pattern is unconstitutional as it violates art. 20(3). It held that a password is "protected personal information that resides in the mental zone" and compelling its disclosure requires an accused to reveal personal knowledge. The court equated this compulsion with impermissible procedures like narcoanalysis or lie detector tests, which forcibly extract information from an accused's mind without their consent, drawing a direct analogy to the *Selvi* case. The court noted that while samples like voice or handwriting can be compelled for the purpose of identification or comparison with existing evidence, a password is not sought for comparison but as a key, making its disclosure a purely testimonial act.

Secondly, in a significant divergence, the court held that unlocking a device through biometrics (such as fingerprints or facial recognition) would *not* violate art. 20(3). The legal basis for this

[31] *CBI v Mahesh Kumar Sharma* 2022 SCC OnLine Dis Crt (Del) 48.
[32] *Supra* note 14.

INDRAPRASTHA LAW REVIEW

conclusion was found in the Criminal Procedure (Identification) Act.[33] The court scrutinized the definition of "measurements" under s. 2(1)(b) of the Act, which explicitly includes "finger impressions, palm-print impressions... iris and retina scan, physical, biological samples". It noted that while the Act empowers a Magistrate to order the collection of such "measurements," the definition conspicuously omits "password" or "user ID". Therefore, the court inferred that while Parliament did not sanction compelling passwords under this Act, it did permit compelling the use of biometrics. The court classified biometrics as physical evidence that does not require the attribution of personal knowledge and is thus not constitutionally protected.

IV. THE FLAWED DICHOTOMY: WHY 'TESTIMONIAL VS. PHYSICAL' FAILS IN THE DIGITAL AGE

The traditional legal framework, established in the Kathi Kalu Oghad cases, separates testimonial compulsion, which is not allowed, from the compulsion to provide physical evidence, which is allowed. Thus, the case for password protection is unmistakable. The mind creates a password, pin, passcode, or pattern. This information is unique to the area of mental privacy that the Supreme Court acknowledged in the *Selvi* case. An accused person is thus directly ordered to divulge their memory by being forced to reveal their password. It is not a straightforward mechanical procedure; the accused must remember and communicate information. This act of communication is the very essence of testimony. The Delhi Special CBI Court correctly identified this, observing that a password is "protected personal information that resides in the mental zone" and its compelled disclosure is tantamount to conducting a prohibited procedure like a narcoanalysis test to extract personal knowledge.[34]

However, the reasoning in *Virendra Khanna* reveals a judicial philosophy where fundamental rights are viewed not as essential guardrails for the criminal justice process, but as inconvenient impediments to it. The court expressed alarm that if mobile phone data were protected, then "no blood samples can be taken, no body sample for the purposes of DNA analysis could be taken, no search of a house or office could be undertaken" and "offences like cybercrime could not be investigated". This type of consequentialist analysis places a key constitutional right below the perceived needs of investigative efficiency. It flips the proper constitutional order. Investigative procedures should work within the limits of fundamental rights, not the other way around. Rights should not be weakened for the sake of investigative convenience.

[33] Criminal Procedure (Identification) Act 2022 (Act No 11 of 2022).
[34] *Mahesh Kumar Sharma* (n 31) [44].

INDRAPRASTHA LAW REVIEW

The courts treated giving a password and accessing the data as two separate things. They said that providing the password was like giving a "key," and therefore not a testimonial act. But this ignores the real point, the only reason the password is needed is to open the device and reveal all its data, which could be incriminating. Giving the password and the search that follows are not separate steps; they are part of the same process. The courts avoided addressing the main issue: can an accused person be forced to help investigators find evidence against themselves? Even under the *Kathi Kalu Oghad* principle, the answer should clearly be no. Because fingerprints and handwriting samples were neutral in and of themselves, they were deemed to be outside the purview of testimonial compulsion. Only when a fingerprint or handwriting sample was compared to, example, a fingerprint from the crime scene or the handwriting on a fabricated letter, could it prove an accused person's guilt.[35]

Biometrics as Functionally Equivalent Testimony

The more complex, yet equally crucial, argument is for the protection of biometrics. The Delhi Court distinguished biometrics as mere physical attributes compellable under the Criminal Procedure (Identification) Act, 2022. This view is critically flawed because it ignores the *function* of the biometric in the context of decryption. As argued in some US courts, passwords and biometrics are "functionally equivalent".[36] Both serve the identical purpose: to act as a key that unlocks a secure digital space. The state is not interested in the physical ridges of a fingerprint or the unique pattern of an iris for identification purposes; it seeks the *result* of applying that biometric feature, i.e., the decryption of the device.

When the state compels an accused to place their finger on a phone's sensor, it is not merely collecting a "measurement."[37] It is compelling the accused to perform an action that is the functional equivalent of typing a memorized password. The act itself is a communication that unlocks a wealth of information, making the distinction between a mental key (password) and a physical key (biometric) a distinction without a difference in this context.

- *Technical Reality*: When a user places their finger on a sensor or looks at a camera, they are engaging a complex cryptographic process. In modern devices, the biometric input allows

[35] *Mahesh Kumar Sharma* (n 31) [27].
> Therefore, it can be said that an accused can be asked or directed to give his biometrics (in the form of his finger impressions, face or iris recognition) for the purpose of opening of his electronic device by the IO or the court.

[36] *In re Search of a Residence in Oakland* 354 F Supp 3d 1010 (ND Cal 2019).

[37] Criminal Procedure (Identification) Act 2022 (n 33) s 2(1)(b), "measurements" includes finger-impressions, palm-print impressions, foot-print impressions, photographs, iris and retina scan, physical, biological samples and their analysis, behavioral attributes including signatures, handwriting or any other examination referred to in section 53 or section 53A of the Code of Criminal Procedure, 1973.

INDRAPRASTHA LAW REVIEW

the device's security processor to release a digital key that decrypts the file system. The biometric is not the evidence itself; it is the *trigger* for the release of the unencrypted data. The "physical" act produces an information. Specifically, some devices store a mathematical representation of the biometric data. Thus, when a match is confirmed, it releases a hardware-entangled key that decrypts the user's data partition. The user is essentially using their body to perform a digital speech act: "Unlock this device."

- *Legal Consequence*: Scholars and some progressive US courts argue that biometrics and passcodes are" functionally equivalent". They both serve as keys to the same lock. Compelling a biometric unlock forces the accused to perform an act that has the *exact same testimonial consequence* as speaking the password: it unlocks the device and exposes its contents. If the state cannot compel the password because it is testimonial, it should not be able to compel the biometric equivalent simply because the input mechanism is different. As argued in *In re Search of a Residence in Oakland* case,[38] biometric features used to unlock a device are "testimonial" because they communicate that the suspect has possession and control of the device and the data within it. By ignoring this equivalence, the law creates a perverse incentive for citizens to use less convenient but more constitutionally protected security measures (passcodes), penalizing the use of modern security features.

A Testimonial Communication of Incriminating Facts

Think of unlocking a device as a silent form of testimony. It isn't just about the data inside rather about the fact that *you* are the one opening it. This in effect proves you own and control everything the police find. The state makes you verify that the device is yours and that the evidence is authentic. Instead of the prosecution proving their case independently, an accused is being compelled to hand them the very confirmation they need to use that data against you. And so much so about the Indian police which has barely gathers exculpating evidences!

Unlike a handwriting sample, which only identifies the writer, unlocking a device acts as a total endorsement of its contents. While a signature doesn't prove the truth of a letter, opening a phone implicitly connects you to every single file, message, and photo stored inside. It's a forced admission of ownership that goes far beyond a simple physical trait; it's essentially you confirming that your entire digital life belongs to you and is under your control. As the US court in *In re Search of a Residence in Oakland* noted,[39] it is the act of providing testimonial evidence that makes the compulsion unconstitutional. The most convincing conclusion from

[38] *In re Search of a Residence in Oakland* (n 36).
[39] *In re Search of a Residence in Oakland* (n 36).

INDRAPRASTHA LAW REVIEW

the overall analysis is that a simple choice, either allowing unrestricted access or enforcing a total ban on compelled decryption, is not enough. A more detailed, rights-focused framework is necessary. The suggested use of the U.S. "Foregone Conclusion Doctrine" presents a hopeful way forward.[40] This approach strikes a fair balance. What it really entails that, it lets the police get to evidence they *already know* exists, like when someone has already admitted to having specific files, without giving them a free pass to go on fishing expeditions.

Navigating the New Legal Landscape: BNSS and BSA

The introduction of the BNSS and BSA in 2023 adds a new layer of complexity to this debate, as these laws modernize the system but leave the issue of forced decryption open to interpretation. Specifically, Section 105 of the BNSS mandates the videography of searches and seizures to ensure transparency and prevent the planting of evidence. While this might seem like a safeguard, it doesn't actually stop a privacy violation; instead, it merely records it. Even worse, because the law doesn't clarify if a "search" includes the digital contents of a device, that very recording could be used to document an accused person's refusal to unlock their phone. This turns a transparency measure into a tool that could be used to punish someone for exercising their right to remain silent.

The Privacy Conundrum

The introduction of the Bharatiya Nagarik Suraksha Sanhita (BNSS) and the Bharatiya Sakshya Adhiniyam (BSA) in 2023 adds new complexity to this debate. However, these laws leaves this issue it up to the courts. However, they do bring procedural changes that affect how digital evidence is handled.

An interpretation of art. 20(3) that allows the state to forcefully decrypt these devices would make the right to privacy meaningless. If the state can force someone to unlock access to their entire digital life, then privacy truly becomes an illusion. When an accused person faces the law, they are a rights-bearing individual, not simply a source of evidence. The state must prove its case through its own investigation. Imagine being taken by the police on just a suspicion and being forced to unlock your phone. In that moment, it becomes all too easy for authorities to misuse personal data for their interests, without any evidence of wrongdoing.

[40] It requires the state to demonstrate with "reasonable particularity" that it already has knowledge of the existence, possession, and authenticity of the specific evidence it seeks.

INDRAPRASTHA LAW REVIEW

V. CONCLUSION

The traditional legal framework, built on the distinction between "testimonial" and "physical" evidence as articulated in *State of Bombay* v. *Kathi Kalu Oghad*,[41] is proving increasingly inadequate to address the realities of the digital age. Personal electronic devices are not mere containers of documents; they are, as one author puts it, "digital versions of their owners" and extensions of the "zone of mental privacy". Forcing an individual to unlock such a device is not a neutral, mechanical act akin to giving a fingerprint for identification. It is a powerful act of communication that testifies to possession, control, and access, thereby authenticating the vast repository of personal data contained within.

The conflicting judicial landscape, from the Karnataka High Court's permissive ruling in *Virendra Khanna*,[42] to the Delhi CBI Court's bifurcated approach in *Mahesh Kumar Sharma*,[43] has created a state of constitutional uncertainty that is untenable. The distinction made in *Mahesh Kumar Sharma* between a memorized password and a biometric fingerprint, while a step toward protecting mental privacy, is ultimately a flawed dichotomy. As both documents argue, these methods are functionally equivalent in the context of decryption; both serve the identical purpose of unlocking a device, and compelling either forces the accused to actively participate in the unearthing of potentially self-incriminating evidence. This artificial distinction fails to address the core constitutional issue: an accused cannot be compelled to provide the key, whether mental or physical, to the lockbox of their digital life.

Instead of trying to force old legal categories onto new technology, we need a rights-based framework that actually reflects the digital age. A promising solution is the Foregone Conclusion Doctrine from U.S. law, which offers a fair compromise. Under this rule, the state can only compel you to unlock a device if they can already prove they know the specific evidence exists, that you possess it, and that it is authentic, for example, if you've already admitted to having certain files. This allows police to access known evidence while blocking the kind of speculative fishing expeditions that strip away your right to privacy and your protection against self-incrimination.

The goal of criminal justice administration shouldn't be to bypass your rights for the sake of efficiency, rather to build a modern system that respects the unique and sensitive nature of our digital lives.

[41] *Kathi Kalu Oghad* (n 10).
[42] *Virendra Kumar* (n 12).
[43] *Mahesh Kumar Sharma* (n 31).

INDRAPRASTHA LAW REVIEW

E-LEARNING: REFORMING THE DIGITAL DIVIDE INTO GOLDEN OPPORTUNITIES IN HIGHER EDUCATION IN INDIA

- Nisheeth Chandrachoor*

ABSTRACT

E-learning, as a pedagogical approach has achieved immense popularity over the past years, primarily because it is convenient, flexible, and cost-effective. However, the digital divide becomes a major obstacle to deliver its transformative educational benefits to young people living in rural, low-income and marginalised communities. One of the greatest strengths of e-learning is its ability to transcend geographical boundaries, enabling the learners to access the educational resources from anywhere with an internet connection. This is particularly relevant to the learners who are living in rural or remote areas and faces poor infrastructure, teacher shortages, and limited access to quality resources. To address the domestic and global challenges, the National Education Policy (NEP) 2020 has also proposed various reforms to promote the growth of the e-learning spaces in the higher education.

The central research question of this paper is to examine, how e-learning can provide a stable institutional framework in the society, closely aligned to constitutional principles of equality, diversity, accessibility, and universal access to education for all enshrined as the fundamental rights and DPSPs. It explores the potential of e-learning to resolve longstanding challenges of access, equity, and quality in higher education due to the existing digital divide. The paper discusses the present situation in higher education in India, identifies areas requiring reform, and evaluates the role of e-learning in higher education to achieve inclusivity and aspirations of Viksit Bharat by 2047. In this light NEP 2020, the paper aims to understand need to develop robust e-learning infrastructure in higher education with a focus to address digital divide.

Keywords: e-learning, NEP 2020, higher education, inclusion, Viksit Bharat.

I. INTRODUCTION

The 75 years history of India as a democratic republic, rooted in the constitutional principles of justice, equity, and dignity for all individuals has formed a strong foundation for the education development. The fast pace of technology development alongside globalisation of higher education and elimination of geographical barriers has created the pathway to new models of learning system called 'E-learning'. E-learning is a paradigm shift in education wherein teaching and learning takes place through the Internet, bridging the gap between conventional classroom spaces and modern learning needs.

The history of e-learning can be traced back to the 1960s with the invention of the PLATO, a computer-based learning system, developed at the University of Illinois that provided networked learning and communication.[1] This marked the first significant step in the modern e-learning paradigms. During 1980s, the increase in the use of personal computers and Internet

* PhD Scholar, Faculty of Law, University of Delhi.

[1] Jeff Michael, 'Welcome Page' (Citizens of PLATO Digital Archive) <https://umsi580.lsait.lsa.umich.edu/s/PLATOs-Citizens/page/welcome> accessed 15 November 2025.

INDRAPRASTHA LAW REVIEW

encouraged the efforts to provide educational content online.[2] Early attempts involved the distribution of educational contents in floppy disk, physically sent to students, and starting computer-based training programmes. These developments led to a wider transition towards e-learning, benefitting those learners who could not attend conventional education. The e-learning started to gain momentum in the early 2000s, driven by the improvement in the Internet infrastructure, bandwidth, and the development of new digital tools to address the modern learning needs.[3] The learning management systems (LMS) like Blackboard and Moodle, which led to a structured delivery of courses, interaction and assessment in a single platform also developed during this period.[4] Higher education institutions, especially in developed countries, introduced fully online courses and degrees to cater the needs of working professionals. E-learning has developed over the last 10 years from marginal educational innovation into a widely adopted alternative, focusing over flexibility, convenience, and an increasing academic rigour worldwide.

E-learning in India started in the early 2000s as an expansion of the distance education offered by Indira Gandhi National Open University (IGNOU) since 1985.[5] Digital connectivity was improved with the expansion of Internet connectivity and the use of digital devices grew with it. By the middle of 2000s, this development encouraged IGNOU and the University of Mumbai to introduce online lectures and e-resources to their regular academic programmes.[6] Such efforts were further strengthened with the National Programme on Technology Enhanced Learning (NPTEL) by the Government of India in 2003. NPTEL offered free, high-quality e-learning courses developed by the IITs and IISc.[7] During 2010, the demand for skill-based education and expansion of literacy programmes saw the adoption of e-learning in the higher education system of India. This change was formalized in 2018 with the University Grants

[2] Linda Harasim, 'A History of E-Learning: Shift Happened' The International Handbook of Virtual Learning Environments (Springer Netherlands 2006) <https://doi.org/10.1007/978-1-4020-3803-7_2> accessed 15 November 2025.

[3] Chana Goldberg, 'How E-Learning Has Evolved Over the Past Few Years' (Online Education Blog of Touro University, 22 July 2019) <https://blogs.onlineeducation.touro.edu/how-e-learning-has-evolved-over-the-past-few-years/> accessed 5 November 2025.

[4] Susan Lang, 'Learning Management Systems (LMSs)' in O Kruse and others (eds), *Digital Writing Technologies in Higher Education* (Springer International Publishing 2023) <https://doi.org/10.1007/978-3-031-36033-6_11> accessed 7 June 2025.

[5] P Kumar, 'India's Distance Education Revolution: From Concept to Reality' (*Distance Learning Institute*, 12 December 2025) <https://distancelearning.institute/management/indias-distance-education-revolution/> accessed 22 December 2025.

[6] Government of India, 'In Depth: Jobs' (*Employment News)* <https://employmentnews.gov.in/newemp/MoreContentNew.aspx?n=InDepthJobs&k=61> accessed 26 October 2025.

[7] National Programme on Technology Enhanced Learning (NPTEL), 'About NPTEL' <https://nptel.ac.in/aboutus> accessed 11 October 2025.

INDRAPRASTHA LAW REVIEW

Commission (UGC) recognizing the online degrees and introduced regulations to ensure quality standards. The development of SWAYAM platform in 2017 further advanced e-learning through integrating free e-learning courses in the national curricula.[8] The adoption of e-learning was also accelerated during the COVID-19 pandemic that pushes traditional universities to move online and increases the role of e-learning in the educational framework. The higher education still continues to integrate e-learning into its institutional setup to address modern learning needs and challenges. This shift from a basic digital intervention to a more mature, modern high end technological system in e-learning has empowered millions of learners across the country.

The COVID-19 pandemic was at the forefront of sudden reforms in education, pushing students and educators around the globe to quickly shift to online teaching and learning approaches.[9] The online platforms such as Google Meet, Zoom, Cisco Webex, and Microsoft Teams became essential for ensuring education continuity. These technologies facilitated real-time virtual classrooms, interactive lectures, and collaborative group work, breaking the isolation caused by social distancing. John Rawls did not write extensively about technology. However, his philosophical framework for justice, known as "justice as fairness" has implications for how we should think about the role of technology in society.[10] Rawls argued that justice is not only fairness in the distribution of resources and opportunities but that any inequalities in society must be justified as leading to benefits of the least advantaged members of society. In the context of technology, this means that we should design and use technology in a way that promotes fairness and reduces inequality.[11]

Integration of e-learning in higher education is not merely a technological modernization, but rather a moral necessity to break down the barriers, foster critical thinking and shape responsible citizen, hence ensuring that no learner is left behind in the quest of a knowledge economy that is just, equitable, and globally competitive. E-learning has the capability of revolutionizing the educational environment not only by bridging access, quality and equity gaps, but also by making a future generation of the population ready to enter an ever more complex world environment. E-learning is, therefore, not just an enabling process but also a blueprint of a Viksit Bharat.

---

[8] Government of India, *SWAYAM: Annual Report 2017–2018* (Ministry of Education 2017) <https://www.swayam.gov.in/> accessed 7 June 2025.

[9] S Dhawan, 'Online Learning: A Panacea in the Time of COVID-19 Crisis' (2020) 49(1) *Journal of Educational Technology Systems* 5.

[10] Morten Bay, Participation, 'Prediction, and Publicity: Avoiding the Pitfalls of Applying Rawlsian Ethics to AI' (2024) 4 AI Ethics 1545.

[11] JW Chapman, 'Rawls's Theory of Justice' (1975) 69(2) The American Political Science Review 588.

INDRAPRASTHA LAW REVIEW

II. EVOLVING CONCEPT OF E-LEARNING

E-learning has evolved over time to capture developments in technology, shift in pedagogical methods, and broader application. The earlier definitions focussed more on the application of technology in management and delivering of educational contents to the learners. Kate Fry (2000) defined e-learning as "the delivery of training and education via networked interactivity and a range of other knowledge collection and distribution technologies."[12] This definition highlights the role of technological tools in the process of learning. European Commission (2001) emphasises on the contribution of e-learning in promoting access to education and collaborative learning spaces. It defined e-learning as "the use of new multimedia technologies and the Internet to increase learning quality by ease of access to resources and services as well as remote exchange and cooperation."[13] This definition brings into focus the benefit of e-learning in transcending geographical barriers and creating a global learning environment. Marc J. Rosenberg (2001) book on 'E-Learning: Strategies for Delivering Knowledge in the Digital Age,' defined, e-learning as "the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance."[14] Rosenberg conceptualised e-learning as a functional tool that not only confined to the academic institutions but also to the corporate world for training and professional development. Similarly, Carol A. Twigg (2002) described e-learning as "centered around the learner and the interactive, self-paced customizable nature of the system."[15] This definition focuses more on the flexibility and personalisation, providing autonomy to the learners to shape their own learning process. Building on these foundations, D. Randy Garrison and Terry Anderson (2003) in their book, 'E-Learning in the 21st Century' expanded the definition by incorporating the interactive and communicative characteristics of e-learning. They described it as both asynchronous and synchronous of mode of communication with the intent of building learning in digital spheres.[16] This transition proposed a pedagogical shift with focus on collaboration and knowledge building possible through both real time and delayed communication. With the development of e-learning on the

[12] Kate Fry, 'E-learning markets and providers: some issues and prospects' (2001) 43 Journal of Education and Training 233.
[13] European Commission, 'Communication from the Commission to the Council and the European Parliament: The eLearning Action Plan – Designing Tomorrow's Education' (Communication) COM (2001) 172.
[14] NH Son, 'E-Learning: Strategies for Delivering Knowledge in the Digital Age' (2001) <https://www.academia.edu/71472555/E_learning_Strategies_for_delivering_knowledge_in_the_digital_age> accessed 1 November 2025.
[15] CA Twigg, 'Quality, Cost and Access: The Case for Redesign' in RA Katz and others (eds), *The Wired Tower: Perspectives on the Impact of the Internet on Higher Education* (FT Press, Upper Saddle River NJ 2003) 111.
[16] D Garrison and T Anderson, *E-Learning in the 21st Century: A Framework for Research and Practice* (Routledge 2003).

global front, organizations like UNESCO and UNICEF expanded its scope and reach. By mid 2000s, UNESCO defined e-learning as "the use of ICT to enhance and support learning processes,"[17] emphasizing its fundamental role in realization of 'Education for All' and addressing global disparities.[18] It directly aligns with Sustainable Development Goal (SDG) 4, which aims for "inclusive and equitable quality education" through harnessing technology to bridge gaps in access and quality.[19] UNICEF advocates for e-learning as "a critical tool for crisis response (e.g., COVID-19) and marginalized groups, such as girls and refugees."[20] According to OECD (2005), e-learning is "the use of information and communication technologies in diverse processes of education to support and enhance learning in institutions of higher education".[21] This definition recognized the increased significance of e-learning in transforming the conventional pedagogical practices. In the 2010s, the definition of e-learning further evolved with contributions of scholars like Albert Sangra, Dimitrios Vlachopoulos and Nuria Cabrera. In 2012, a paper titled "The International Review of Research in Open and Distributed Learning," published by them, defined e-learning as "an approach to teaching and learning, representing all or part of the educational model applied, based on the use of electronic media and devices as tools to improve access to training, communication and interaction, and that promotes the adoption of new ways of understanding and development of learning."[22] This holistic approach through integrating technology, pedagogy, and social interactions conceptualised e-learning as an innovative approach to education that re-aligns itself with the modern educational needs and evolving teaching strategies. Arkorful and Abaidoo (2015) highlighted the role of e-learning in "providing access to online teaching and learning resources."[23] Clark and Mayer (2016) defined it as "instructions delivered through digital devices (computers or mobile devices) to support learning."[24] During the COVID-19 pandemic,

[17] 'Digital Learning and Transformation of Education' (UNESCO, 22 June 2026) <https://www.unesco.org/en/digital-education> accessed 13 February 2026.
[18] 'What you need to know about digital learning and transformation of education' (*UNESCO*, 17 September 2024) <https://www.unesco.org/en/digital-education/need-know\>accessed 22 June 2025.
[19]'Goal 4: Ensure Inclusive and Equitable Quality Education and Promote Lifelong Learning Opportunities for All' (*UN Sustainable Development Goals*) <https://unstats.un.org/sdgs/report/2017/goal-04/> accessed 22 June 2025.
[20] UNICEF, 'Guidance on Continuity of Learning during COVID-19: Reaching All Children' (UNICEF Regional Office for South Asia 2020).
[21]Organisation for Economic Co-operation and Development, *E-Learning: The Partnership Challenge* (OECD Publishing 2005).
[22] K.P. King and R. Boyatt, 'Exploring Factors That Influence Adoption of E-Learning within Higher Education' (2015) 13 *International Journal of E-Learning* 511 <https://files.eric.ed.gov/fulltext/EJ983277.pdf> accessed 23 June 2025.
[23] S Dhawan, 'Online Learning: A Panacea in the Time of COVID-19 Crisis' (2020) 8(2) *Education* 5 <https://doi.org/10.12691/education-8-2-4> accessed 13 October 2025.
[24] Ruth Colvin Clark and Richard E Mayer, *E-Learning and the Science of Instruction* (2016).

INDIAN CITIZENSHIP REVIEW

the concept of e-learning expanded exponentially, combining the existing technological and pedagogical perspectives into a more comprehensive and inclusive framework. UNICEF considers e-learning as an urgent crisis response tool (e.g., COVID-19) and as a tool to communities in need (i.e. girls and refugees).[25] These evolving definitions of e-learning assets its growing importance and adoption in the digital era, bridging the digital divide.

III. CURRENT STATE OF HIGHER EDUCATION IN INDIA

India's higher education system, with over 58,643 HEIs (registered in AISHE 2021-2022) as of 2024,[26] remains one of the largest in the world.[27] Despite remarkable increase in the number of Higher Education Institutions (HEIs), the Gross Enrolment Ratio (GER) in higher education stands at 28.4% for 2021-22,[28] still trailing the global average of 36.4% and ranking lowest among G20 nations. While marginalized communities of Scheduled Castes (SCs), Scheduled Tribes (STs), and Other Backward Classes (OBCs) have driven enrollment growth, but systemic inequalities still persist.

The Gross Enrolment Ratio (GER) for students from Scheduled Tribes (ST) is currently stands at 21.2%,[29], which is significantly lower than the national average of 56.7 percent and the GER in rural areas is 15 percent lesser as compared to urban areas. Female enrolment has been steadily increasing, with 2.07 million students in 2021-22, a 32 percent increase over year 2014-15. The persistent increase in GER reflects a progress toward gender equality in higher education.[30] National Education Policy (NEP) 2020 aims at achieving a GER including vocational education to 50 per cent in higher education by 2035.[31] The NEP will address these gaps by expanding e-learning, supported by the Digital India 2.0 Initiative. It aims to achieve 90 percent internet penetration in rural institutions and distribute subsidized tablets to 10 million disadvantaged students.[32] The initiatives like SWAYAM++ (launched in 2024), provide AI-based personalized learning in local languages. It also promotes collaboration of HEIs with international universities under the Study in India Programme 2.0, opening avenues

[25] UNICEF, 'Digital Education' (*UNICEF*) <https://www.unicef.org/digitaleducation/> accessed 1 August 2025.
[26]Ministry of Education, Government of India, *All India Survey on Higher Education (AISHE) 2021-2022* <https://cdnbbsr.s3waas.gov.in/s392049debbe566ca5782a3045cf300a3c/uploads/2024/02/20240719952688509.pdf> accessed 23 August 2025.
[27] It is here to be noted that, department of Higher Education under Ministry of Education has invited data submission from HEIs for AISHE 2023-24, which may potentially reflect changes compared to the currently available data from AISHE 2021-22 report.
[28] Ministry of Education (n 26).
[29] Ministry of Education (n 26).
[30]'Ministry of Education Releases All India Survey on Higher Education (AISHE) 2021-2022' (*PIB Delhi*, 24 January 2024) <https://pib.gov.in/PressReleasePage.aspx?PRID=1999713> accessed 25 August 2025.
[31] Ministry of Education, Government of India, *National Education Policy 2020* (2020) 40.
[32] Ministry of Education (n 31).

INDRAPRASTHA LAW REVIEW

for better research opportunities in higher education. However, some challenges still remain there, such like, digital illiteracy which affects 45 percent of the rural youth, poor digital infrastructure and accessibility, which requires immediate intervention.[33] To address these challenges within the aspirations of Viksit Bharat vision by 2047, it is important to integrate e-learning through constitutional reforms and foster innovation, critical thinking and global competitiveness.

The Central government has remained committed to strengthen accessibility, quality, and inclusivity in the higher education. The Department of Higher Education has been allocated ₹50,077.95 crore for FY 2025-26, with the overall increase of ₹2,458.18 crore (5.16%) in the higher-education budget for 2025–26 compared to 2024–25, highlights the India's commitment to reshape its education as a driver of equitable growth, so that no learner is left behind in the developmental process of the country.[34] Moreover, the continuous privatization of higher education raises serious concerns over affordability and equity. The National Education Policy (NEP) 2020 attempted to address the issue by increasing public investment in public higher education. Even though the public institutions become more cost-effective and accessible, they lack infrastructure and resources. This underscores the urgent need to have a holistic framework that focuses on accessibility, quality and equity while fostering harmonious co-existence between the private and the public higher education institutions.

IV. DIGITAL DIVIDE IN HIGHER EDUCATION IN INDIA

Digital divide in higher education has severely impacted the rural, low-income, and female students, limiting their ability to access e-learning.[35] The robust digital infrastructure in the urban areas facilitates easy access of internet among learners. The current statistics reveal that urban regions constitute more internet users, whereas the rural regions are still very far behind them. The National Family Health Survey (2019-2021) shows that 72.5 percent of urban men and 51.8 percent of urban women use the internet, whereas only 48.7 percent of urban men and 24.6 percent of urban women uses internet.[36] The Oxfam India report, 2022, shows the increasing digital divide along socio-economic lines, where only 8.9 percent of households in

[33] 'ASER 2024 (ASER: Annual Status of Education Report)' (ASER Centre 2025) <https://asercentre.org/wp-content/uploads/2022/12/ASER_2024_Final-Report_13_2_24-1.pdf> accessed 5 April 2026 accessed 25 August 2025.

[34] '**Union Education Minister Lauds Historic Budget' 2025-26** (*PIB Delhi*, 1 February 2025) <https://pib.gov.in/PressReleasePage.aspx?PRID=2098805> accessed 25 August 2025.

[35] E Goyal and N Vohra, 'E-learning adoption in higher education in India: Issues and challenges' (2012) 3(4) International Journal of Emerging Trends in Computing and Information Sciences,143.

[36] Ministry of Health and Family Welfare, Government of India, *Compendium of Fact Sheets: India and 14 States/UTs (Phase-II)* (National Family Health Survey 5, 2021) <https://main.mohfw.gov.in/sites/default/files/NFHS-5_Phase-II_0.pdf > accessed 25 August 2025.

INDRAPRASTHA LAW REVIEW

the bottom 20 percent of poorest have internet access.[37] The digital divide is further aggravated by gender gap. The same report also indicated that the subscription cost of e-learning platforms and expensive digital devices has significantly impacted the low-income families, thereby limiting their access to e-learning. According to a National Sample Survey Office (NSSO) report published in 2023, only 24% of rural households have access to the internet, compared to 66% of urban households.[38] According to GSMA (2020) data, only 21 per cent of women have the access to internet via mobile devices, compared to 42 per cent of men.[39] This gap directly restricts the use of e-learning platforms to acquire skills and limiting the universal access to education among the marginalized population. The increasing gender disparity and caste-based discrimination further marginalizes more students, especially those belonging from Scheduled caste and Scheduled Tribe, who have 27% lower rates of internet access than others. The problems of the digital divide are profound. It is a barrier that prevents equitable access to higher education by many and worsening the existing inequalities. However, the Telecom Regulatory Authority of India (2024), asserts that the digital penetration in India is constantly growing.[40] The Internet in India 2024 report, published by Kantar and the Internet and Mobile Association of India (IAMAI) projected the internet user base to surpass 900 million by 2025.[41] The access to e-learning is hindered by social, economic and geographical barriers at various levels. The National Family Health Survey (2019-2021) reveals that the cultural biases However, internet access in rural regions remained low at 45 percent, thereby resulting into significant digital exclusion. The Economic survey 2024-25 projected the Gross Enrolment Rate (GER) in higher education to be 28.4 per cent, indicating a remarkable progress but inclusion of marginalized groups has still not been achieved. The National Education Policy 2020 aims to achieve a 100 per cent Gross Enrolment Ratio by the year 2030.[42] The unequal access to digital technologies can limit the potential of e-learning, preventing it from becoming an accessible and adaptable learning platform. E-learning platforms hold the potential of

[37]Oxfam India, *Inequality Report 2022* (Oxfam India 2022) <https://oxfamindia.org/inequality-report-2022> accessed 25 August 2025.

[38] National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India, '*Household access to internet and digital devices: NSSO 2023*' (2023).

[39] GSMA and others, '*GSMA Connected Women – The Mobile Gender Gap Report 2020*' (2020) report <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2020/02/GSMA-The-Mobile-Gender-Gap-Report-2020.pdf> accessed 25 August 2025.

[40]Telecom Regulatory Authority of India, '*Annual report 2024: Internet penetration in India*' (2024) <https://www.trai.gov.in/release-publication/reports> accessed 9 September 2025.

[41]ET Bureau, 'India's Internet User Base to Surpass 900 Million by 2025 Driven by Rural Growth: Report' (*The Economic Times*, 16 January 2025) <https://economictimes.indiatimes.com/industry/telecom/telecom-news/indias-internet-user-base-to-surpass-900-million-by-2025-driven-by-rural-growth-report/articleshow/117304976.cms> accessed 9 September 2025.

[42]Ministry of Education (n 31).

democratizing the education through access to high quality educational resources, personalized learning pathway, skill-oriented courses, and broader employment opportunities. These benefits can be materialized by adopting holistic and comprehensive policy framework that focuses more on inclusivity in the higher education, thereby empowering the youth and socio-economically disadvantaged groups.

V. CONSTITUTIONAL BASIS OF DIGITAL ACCESS IN HIGHER EDUCATION

The Constitution of India does not explicitly recognize digital education, but it has become an integral component of the constitutional framework in contemporary India. The current constitutional understanding of digital access in higher education demands some discussion on the historical evolution of right to education in India. During framing of constitution, being recognized as non-justiciable directive principle under Article 45, it transformed into an enforceable fundamental right through decades of judicial activism and constitutional amendments. The Indian Constitution under Article 45 provided for the right to free and compulsory education up to the age of fourteen years as a directive principle.[43] But there was a significant shift following the 86th Constitutional Amendment in 2002 that made education a fundamental right.[44] This amendment added Article 21A which made it the duty of state to provide "free and compulsory education to all children aged 6 to 14 years."[45] This shift from a directive principle to a fundamental right significantly strengthened the legal framework for education in India. In 1976, the Constitution was amended to include education in the Concurrent List, thus enabling both the central and state governments to legislate on the subject related to education. The amendment was intended to strengthen coordination and allocation of resources in the education sector hence providing a platform of collaboration in ensuring that disparities in education are narrowed. Despite this structural reform, some challenges such as inequitable access, lack in quality and poor governance that persist as a hindrance in realisation of a just and equitable higher education system. Consequently, constitutional reforms become important to address these challenges effectively. These reforms should focus to include the right to higher education as one of the fundamental rights.

In *Mohini Jain* v. *State of Karnataka*,[46] the Supreme Court recognized that the right to education is inherent to Article 21, as a life with dignity and access to education are inseparable.

[43] *The Constitution of India* 1950, art 45
[44] The Constitution (Eighty-sixth Amendment) Act 2002 (India).
[45] The Constitution of India 1950, art 21A.
[46] *Mohini Jain v State of Karnataka* (1992) 3 SCC 666.

INDRAPRASTHA LAW REVIEW

Later, in *Unni Krishnan* v. *State of Andhra Pradesh*,[47] the Supreme Court upheld Mohini Jain case, but restricted the fundamental right to free education in Article 21 to children to 14 years. In the case of higher education, the Court held that the right of the citizen is limited by the available financial resources of the State hence linking higher education more to the Article 41 of constitution. More recently, in *Justice for All* v. *Government of NCT of Delhi*,[48] the Delhi High Court adopted an expanded interpretation of the Right to Education Act, and held that the RTE Act as an "always speaking statute," extending education to include online learning. It condemned exclusion of EWS students as "digital apartheid" and ruled that private unaided schools must provide free laptops, mobile phones, tablets, and high-speed internet to children from Economically Weaker Sections (EWS) and Disadvantaged Groups (DG) under Section 12(1)(c) of the RTE Act,[49] with State reimbursement under Section 12(2)[50] of this act. Although the judgement in this case is connected to elementary education under Article 21A,[51] its jurisprudential reasoning extends into the domain of higher education through Article 21 of constitution. When a university starts providing education in either a digital or a hybrid form, any failure to ensure that all admitted students possess the necessary technological means constitutes denial of the right to education, thereby violating the fundamental right to life with dignity. In the digital age, the Supreme Court in *Pragya Prasun* v. *Union of India*[52] and *Amar Jain* v. *Union of India*[53] held that the "right to digital access" is inherent to Article 21. The Court said that because modern education, governance, and essential services are conducted on the digital platforms, digital exclusion amounts to a deprivation of life and liberty. Moreover, digital access in higher education is also integral to principle of equality under Articles 14 and 15, as the digital divide reflects existing inequalities based on caste, class, gender, and geographical setup. Article 14, as affirmed in *E.P. Royappa* v. *State of Tamil Nadu*,[54] prohibits arbitrariness, while Article 15 protect against discrimination, and hence limited access of digital education due to high costs of technological devices and uneven access to internet undermine equal opportunities. The doctrine of 'indirect discrimination,' recognized in *Lt. Col. Nitisha* v. *Union of India*[55] becomes relevant in this context. It holds that neutral policies causing disproportionate disadvantage violates substantive equality. Therefore, any policy promoting

[47] *Unni Krishnan v State of Andhra Pradesh* (1993) 1 SCC 645.
[48] *Justice for All v Government of NCT of Delhi* 2020 SCC OnLine Del 2080.
[49] Right of Children to Free and Compulsory Education Act 2009, s 12(1)(c).
[50] Right of Children to Free and Compulsory Education Act 2009, s 12(2).
[51] The Constitution of India 1950, art 21A.
[52] *Pragya Prasun v Union of India* 2021 SCC OnLine SC 1402.
[53] *Amar Jain v Union of India* 2022 SCC OnLine SC 1523.
[54] *E.P. Royappa v State of Tamil Nadu* (1974) 4 SCC 3.
[55] *Lt Col Nitisha v Union of India* (2021) 15 SCC 125.

digital education in the absence of the supportive infrastructure is indirectly discriminatory, and the State has a positive duty to eliminate digital divides.

In the contemporary landscape of digital higher education, uneven distribution of the access to internet, affordability of high-end devices, and digital literacy gaps in urban and rural India led to the inequalities in educational opportunity. Article 38(2) and 39(b) provides duties on the state to ensure the equitable distribution of technological infrastructure bridging the digital divide.[56] Similarly, Article 41 governs the delivery of higher education, which now must include access to digital education in higher education. Furthermore, Article 46 provides an affirmative duty on the state to ensure equity and inclusion by providing scholarships, distribution of technological devices, affordable internet access, and inclusive digital learning content as a welfare measure to lift Scheduled Castes, Scheduled Tribes and other marginalized groups that are disproportionately impacted by the digital divide due to socioeconomic, geographic, and cultural background. Hence, the constitutional rights to education, equality, and dignity offer a strong foundation to define the digital access as part of higher education in the modern time. By recognizing digital inclusion as a part of the constitutional framework, the State ensures that technological barriers would not become an impediment to achieve the universal and equal access to the higher education for all.

VI. TRANSFORMATION IN HIGHER EDUCATION THROUGH E-LEARNING

The e-learning landscape in the country is a vibrant and developing ecosystem of online platforms. One such initiative is SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds), a government-run initiative that provides a repository of MOOCs (Massive Open Online Courses), with currently over 3000 courses, provides access to e-learning for millions of learners.[57] The National Education Policy (NEP) 2020 is another bold initiative toward revolutionizing higher education through e-learning. The establishment of National Digital University (NDU) under Budget 2022-23 rooted in the vision of NEP 2020. It aims to provide online education across India in collaboration with public and private higher educational institutions, thereby democratizing access to higher learning.[58] Recently, in line to NEP 2020, the Union Budget 2025 proposed Bharatiya Bhasha Pustak Scheme[59] to digitize

[56] The Constitution of India 1950, arts 38(2) and 39(b).

[57] Ministry of Education, Government of India, *SWAYAM Annual Report 2023-24* (Ministry of Education 2024) <https://www.swayam.gov.in/> accessed 4 October 2025.

[58] Ministry of Education (n 31) 42.

[59] 'Union Budget 2025-26 Unveils Transformative Initiatives' (*PIB Delhi*, 10 February 2025) <https://pib.gov.in/FactsheetDetails.aspx?Id=149124&reg=3&lang=1> accessed 4 October 2025.

INDRAPRASTHA LAW REVIEW

Indian language textbooks and academic materials for school and higher education. It will focus on making the availability of educational resources in 22 scheduled languages, creating a centralized digital library consisting of e-books, audiobooks and interactive content, to encourage learning in desired languages. The National Education Policy (NEP) 2020 advocates for the expansion of e-learning platforms to ensure that education is accessible to all, especially those in remote and disadvantaged areas. The expansion of initiatives such as **"One Nation One Subscription" (ONOS),**[60] **INFLIBNET, SWAYAM** and **MOOCs** (Massive Open Online Courses) aligns seamlessly with the transformative vision of the National Education Policy (NEP) 2020, which prioritizes technology-driven, equitable, and inclusive education. Television-based content through Swayam Prabha DTH channels is another way to reach out to learners, especially places where the access to internet remains a challenge. The Gyanvani educational radio and the GyanDarshan TV channels launched in the early 2000s by IGNOU (Indira Gandhi National Open University) in partnership with Prasar Bharati, catered learners without the requirement of internet or high-end digital devices, reflecting the efforts to reach every corner and mass-media driven education. The Gyan Darshan also expanded under the PM e-VIDYA initiative through the launch of 40 SWAYAM Prabha DTH channels for uninterrupted learning to millions of remote based learners.[61] Given that teachers are at the heart of e-learning, imparting training to them remains a crucial focus area. NISHTHA (National Initiative for School Heads' and Teachers' Holistic Advancement),[62] another major initiative aimed at capacity buiding of teachers through imparting trainings on digital literacy. The initiatives such as Digital India and PM-WANI have opened the door to internet access for 954.40 million users across India, but connectivity in rural India is still remained a challenge.[63] Institutions like IIT Madras have addressed this problem by providing the option for offline variant courses on platforms like NPTEL, which has 1 crore plus learners since its launch in 2006.[64] On a similar note, TESS-India (Teacher Education through School-Based Support) offers downloadable materials for teachers working in low-bandwidth internet spaces, thereby

[60]'About: One Nation One Subscription (ONOS)' (*ONOS*) <https://www.onos.gov.in/about\> accessed 4 October 2025.
[61]'About PM e-Vidya' (*Swayam Prabha*) < https://swayamprabha.gov.in/about/pmevidya > accessed 7 October 2025.
[62]Ministry of Education, Government of India, *NISHTHA Programme Report 2023* (Ministry of Education 2023) <https://nishtha.ncert.gov.in/> accessed 14 October 2025.
[63]'As of April 2024, 95.15 Per Cent Villages Have Access to Internet' (*PIB Delhi*, 2 August 2024) < https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2040566> accessed 4 March 2025.
[64] NPTEL (n 7).

INDRAPRASTHA LAW REVIEW

reaching approximately to 7 million educators.[65] Thus, building digital competencies among educators is not only about enhancing their skills but also ensuring their accessibility of good internet connections, thereby empowering them to guide students very effectively.

VII. CHALLENGES AND LIMITATIONS OF E-LEARNING FOR PROMOTING DIVERSITY AND INCLUSION

E-learning has emerged as a transformative tool in modern education, offering greater flexibility and accessibility.[66] However, it's potential to promote diversity and inclusion is undermined by significant challenges, specifically in addressing systemic inequalities. Digital divide/Digital inequities in access to technology and the internet remains one of the major challenges to e-Learning adoption.[67] The students from low-income households or geographically remote areas faces many challenges, including poor internet access, infrastructure disparities between rural and urban areas, and a lack of proper digital skills, which tend to widen the existing digital divide. A The National Sample Survey Office (NSSO), 2023 study revealed that less than 24 per cent of rural households have access to the internet in India, thereby excluding millions of people from the benefits of e-learning.[68] Cultural sensitivity in e-learning content remains another challenge even when the access is available.[69] The material reflects on the cultural dominant perspectives, which silence the voices of the marginalized groups like the indigenous people or non-English speakers. Thus, whose identity and experiences are under-represented may feel excluded from the mainstream e-learning. This cultural prejudice may discourage the interaction, as highlighted in a 2023 UNESCO report, indicating that 60 per cent of students from minority backgrounds did not feel that e-learning contents are relevant to their real lives.[70]

INDRAPRASTHA LAW REVIEW

[65] Igor Lesko, '*Open Educational Practices: Sharing Through ePortfolios'* <https://oep.merlot.org/docs/tess-india.pdf> accessed 4 March 2025.
[66] Mohammed Nasser Hassan Ja'ashan M, 'The Challenges and Prospects of Using E-Learning among EFL Students in Bisha University' (2020) 11 Arab World English Journal 124.
[67]AL Baylor and D Ritchie, 'What Factors Facilitate Teacher Skill, Teacher Morale, and Perceived Student Learning in Technology-Using Classrooms?' (2002) 39 Computers & Education 395.
[68] A Malhotra, 'Bridging the Urban-Rural Digital Divide in India' (*Inc42 Media*, 16 March 2024) <https://inc42.com/resources/bridging-the-urban-rural-digital-divide-in-india/#:~:text=According%20to%20the%20latest%20National,to%2059%%20of%20urban%20adoption.> accessed 15 October 2025.
[69]M Condruz-Bacescu, 'Cultural Challenges of E-Learning' (Proceedings of the 9th International Scientific Conference eLearning and Software for Education, 2013) 573.
[70]UNESCO, *Global Education Monitoring Report 2023: Technology in Education: A Tool on Whose Terms?* (UNESCO 2023).

The external Tools and technologies are also very important to facilitate easy access to e-learning among students.[71] However, some gaps still persist. Lack of academic support systems among students belonging to marginalized groups often leads to deprivation in adequate support in e-learning. A study at Indian Institute of Technology (Delhi) in 2024 finds that the dropout rate in e-learning programmes among first-generation learners is 28 per cent more compared to traditional classroom settings.[72] This highlights the necessity to provide external support to such groups of learners. The lack of interaction and engagement in e-learning might also isolate learners, especially those who rely on peer support to sustain their cultural or linguistic identity. The geographical isolation does not alone prevent meaningful classroom interaction. However, e-learning format can inadvertently recreate a systemic gap favoring those who are confident speakers and more adapted to technologies. Further, the inclusivity becomes more challenging by the pedagogical change needed for effective e-learning. A study indicated that teachers lack confidence in developing culturally responsive e-learning modules, resulting in the reliance on thus keeping on "one-size-fits-all" approaches.[73] To address these challenges, experts propose blended learning models that combine online flexibility with in-person engagement, so that disadvantaged students could be provided with not only technological accessibility but also human interaction. Finally, potential of e-learning lies on the systemic changes that bridges the digital divide, diversify the curriculum, and promote pedagogical flexibility, thereby ensuring the diversity and inclusion not just an aspiration but a reality in the digital education.

VIII. WAY FORWARD

The National Education Policy (NEP) 2020, deeply rooted in constitutional values of access, equity, quality, accountability, and affordability, provides a framework, but realizing its aspirations in equality of opportunity, social justice, quality, inclusivity, critical thinking, and ethical citizenship demands a synergistic approach combining constitutional reforms with the strategic integration of e-learning. Viksit Bharat by 2047, envisioning India as a global power with high living standards and equitable growth rests on a highly skilled workforce. With over 50% of its population below the age of 25 years,[74] India possesses a demographic dividend that,

[71]P Gupta, S Reddy and V Kumar, 'Challenges and Opportunities of E-Learning in Indian Higher Education' (2019) 12(2) International Journal of Distance Education 112.
[72]S Darcy, 'Disability, Access, and Inclusion in the Event Industry: A Call for Inclusive Event Research' (2012) 16 Event Management 259.
[73]MK Williams and others, 'Teacher Self-Efficacy in Technology Integration as a Critical Component in Designing Technology-Infused Teacher Preparation Programs' (2023) 23(1) Contemporary Issues in Technology and Teacher Education.
[74] 'More than 50% of India's population 25 yrs or older: Survey' (*mint*, 3 July 2020)

INDRAPRASTHA LAW REVIEW

if properly educated, can transform India to achieve its aspiration of becoming a Viksit Bharat by 2047. This makes the higher education, along with moral and ethical education, a cornerstone of this transformation. The Union Budget 2025 focuses on agriculture, MSMEs, investment, and exports as pillars for Viksit Bharat. This requires higher education institutions to develop human capital, promote research and innovation, strengthen global competitiveness, and foster social cohesion.[75]

The Indian constitutional framework has broadly interpreted to accommodate the evolving discourses on 'digital constitutionalism' in education from time to time. Digital constitutionalism means that the constitutional legal principles should be adopted to address the new challenges posed by the digital technologies so that the basic rights that are guaranteed in the real world would be equally protected in the virtual one. The philosophical essence of Fundamental Rights and Directive Principles is increasingly being implemented through executive policy and legislative action. For example - The National Education Policy (NEP) 2020 aligns with the Articles 38, 41, and 46 constitutional goals by focusing on universal access to higher education, equity, and use of technology to overcome educational disparities. The constitutional framework and judicial activism are not enough to mitigate the existing digital divide. To realize the constitutional vision of equitable higher education and a Viksit Bharat by 2047, the State must recognise 'digital access' beyond the technological advancements. The approach includes recognising the digital connectivity as an essential public utility, similar to other essential needs, such as water or electricity. This demands long-term public investment in digital technologies and making it more affordable to students, development of rural internet infrastructure, and the implementation of universal access to education in the higher educational institutions. This can be only achieved through adopting a holistic, rights-based framework on digital infrastructure, making it inclusive, accessible, and equitable to even the most marginalised sections in society. Together, these reforms can pave the way to deliver quality and excellence in higher education that aligns with India's democratic values and aspirations of Viksit Bharat.

E-learning offers a scalable solution to expand access to quality education, particularly in remote locations and personalize learning experiences. To fully leverage these potential, constitutional reforms is needed to explicitly recognize the right to quality higher education,

<www.livemint.com/news/india/more-than-50-of-india-s-population-25-yrs-or-older-survey-11593793054491.html> accessed 15 November 2025.

[75]'Union Budget 2025-2026', National Portal of India (*National Portal of India*) <www.india.gov.in/spotlight/union-budget-2025-2026> accessed 15 November 2025.

imposing duty on the government to bridge the digital divide, and establish robust quality assurance mechanisms for e-learning. One way, the state can promote equality in e-learning is by investing in technology infrastructure and providing access to high-speed internet services and computer equipment to learners. This is particularly significant for those learners who lack the accessibility of necessary technological resources at home. To address this challenge, the government can collaborate with schools and internet providers ensuring that all students have the access to technology needed for digital education. In addition, the government can promote equality in e-learning through providing financial assistance to both school and student. This may involve providing the financial aids to support e-learning platforms, educational software and other tools that improve e-learning setup. Moreover, the government can provide direct financial support to low-income students who can't afford technological devices or internet connection to bridge the existing digital gaps.

IX. CONCLUSION

E-learning holds a tremendous potential to reshape the higher education, closely aligning to the constitutional ideal of social justice by ensuring universal access to education for all. Its potential to overcome geographical barriers, socio-economic constraints, support diverse learning needs and promote collaboration creates a strong pathway towards a more equitable and inclusive digital learning spaces. Its ability to reach the students in remote locations, students with disabilities, and those from disadvantaged backgrounds is very significant. However, unless it is done intentionally and with proper policy design, it may increase the existing disparities. It is evident that deep disparities exist in between rural and urban students when it comes to the access to the internet and ownership of digital devices. Further, the COVID-19 pandemic that led to the discontinuation of education in physical setup and educational continuity become fully reliant on digital modalities has exposed the inequalities related to the digital divide. It was in these unparalleled circumstances that the failure of the State to provide the marginalized students with the necessary digital devices made the constitutional goals, a formalistic empty promise. Digital divide in the form of access to technology, better internet connectivity and digital literacy should be bridged. By leveraging digital technologies and innovative pedagogical strategies, e-learning can democratize the knowledge and enable learners with skills in this 21st century. The potential of e-learning can only be realized after resolving the associated inherent challenges.

E-learning is not the silver bullet, but it is a powerful tool capable of transforming the higher education into a more equitable and inclusive space. Recognizing access to internet and digital

INDRAPRASTHA LAW REVIEW

tools as the basic component in higher education will ensure that digital learning is not just a challenge but a reality of all students in India. This can only be achieved through coordination and multi-faceted efforts involving policy makers, teachers, technology providers and the civil society. It requires a strong and comprehensive national policy on e-learning, strategic investment in digital infrastructure, skills training among teachers, curriculum reform and development of accessible open e-resources. The legal developments in past have shown jurisprudential flexibility of Indian constitutional framework to quickly respond to rapid accelerated technological transformation and safeguard its citizens against the digital marginalization. The judiciary has also played an instrumental role in addressing the digital divide in higher education in India. The right to education and equality guaranteed by the Constitution suggests that there is a need to fill this gap by reinforcing the constitutional mandate provided under fundamental rights and DPSPs, which the judiciary has reaffirmed through its judgements from time to time. India can tap the potential of e-learning and establish a just, equitable and globally competitive higher education system, empowering every learner in the country. A robust and a well-designed education system provides a solid backbone for a developed and vibrant nation, contributing to social, economic, and cultural growth. Such a move would turn the divide into a golden opportunity fulfilling the constitutional promise of universal access of education to all and meeting the aspirations of Viksit Bharat by 2047.

INDRAPRASTHA LAW REVIEW

PROTECTING CUSTOMARY INTERNATIONAL LAW FROM ISDS SUBORDINATION: INDIA'S MODEL BIT REFORMS

- Manmeet Dhillon*

ABSTRACT

"Investment justice blooms where treaty shields embrace customary roots, or it simply withers into unbalanced capital dominance absent reconciliation."

Customary international law (CIL) has laid the foundations of the existing international investment regime through Neer/Hull minima and diplomatic protection, but BIT lex specialis subordinates these minima across ~2,400 treaties via autonomous FET evolution. Tribunals claim CIL evolution (from Neer/Hull minima to legitimate expectations) while prioritizing BIT standards over VCLT Art 31(3)(c) harmonious interpretation and thrusting Global South jurisdictions into a legal and policy quagmire. Analysing 15 ISDS awards viz. White Industries (India's PESA/FRA vetoes), Piero Foresti (Africa's Land Act/BEE equity), Bear Creek (Peru ILO 169 FPIC), this article traces Global South resistance gradients and proposes hybrid ISDS reforms operationalising VCLT Art 31(3)(c), aligned with UNCITRAL WG III proportionality reforms. India's Model BIT 2015 preserved sovereignty via 58 BIT terminations but retains gaps: dyadic privity exclusion, MFN loopholes, 80% PESA non-compliance. Critically evaluating whether BIT standards (FET, MFN, full protection) accommodate or undermine local customary law protections, the author advocates for policy innovations and proposes a transforming architectural solution that includes provisions for hybrid tribunals (Art 15), FPIC- FET calibration (Art 4.5), customary exhaustion (Art 9.4), integrating parallel legal orders into cognizable ISDS norms that balance investor protection with indigenous rights.

Keywords: India's Model BIT Reforms, Customary International Law, Bilateral Investment Treaties, lex specialis, Hybrid ISDS tribunals, VCLT Art 31(3)(c).

I. INTRODUCTION

Customary International Laws (CIL) are "living" traditions having a binding legal force, evolved organically through community practices, beliefs and consensus rather than legislative fiat.[1] Unlike treaties binding only parties, CIL universally constrains states and is a primary source of international law, alongside treaties and general principles.[2] These norms are vital in framing modern laws and lending legitimacy to statutory frameworks where they incorporate rather than supplant local practices. For instance, the communal land tenure upheld in *Samatha v. State of Andhra Pradesh* (India) governs tribal stewardship against commodification,[3] while

* Research Scholar, USLLS, GGS IP University.

[1] Antony Allott, *The Limits of Law* (1980) 223-28.

[2] Statute of the International Court of Justice (adopted 26 June 1945) 33 UNTS 993 art 38(1)(b).

[3] *Panchayats (Extension to Scheduled Areas) Act 1996* (India) s 4(i); *Samatha v State of Andhra Pradesh* (1997) 8 SCC 191 (India) (*PESA*).

INDRAPRASTHA LAW REVIEW

African pastoralist norms adapt fluidly to drought and market integration.[4] In fact article 31(3)(c) of Vienna Convention on Law of Treaties (VCLT) mandates treaties to be interpreted in the light of relevant CIL rules in order to ensure harmonious construction.[5] Tribunals routinely cite this, yet systematically prioritize BIT *lex specialis* over CIL *minima*.

CIL investor protections crystallised post-World War I: *Neer* (1926) defined MST prohibiting egregious arbitrariness;[6] *Chorzów Factory* (1928) mandated *Hull Formula* compensation via state espousal.[7] BITs systematically sidelined these pillars, as evidenced by *Mondev* (2002) evolving *Neer's* arbitrariness into autonomous FET legitimate expectations in India;[8] *CMS* (2005) demanding stable frameworks beyond historical baselines in Argentina;[9] *White Industries* (2011) treating judicial delays as actionable despite India's PESA vetoes;[10] *Piero Foresti* (2010) rejected South Africa's BEE equity as exceeding customary powers,[11]and *Bear Creek* (2017) limited Peru's ILO 169 FPIC to damages mitigation[12], rendering customary minima functionally obsolete within dyadic ISDS frameworks.

"Far from being clearly delimited and mutually exclusive, the customary and the statutory are usually intertwined in complex mosaics of resource tenure systems,"[13] yet current recalibrations miss this interdependent function, mischaracterizing normative inversion as continuity. The conflicts reveal this imbalance. Global South states reject traditional ISDS, clearly visible from India's termination of 58 BITs post-*White Industries*; South Africa's enactment of Protection of Investment Act, 2015 (domestic courts only); UNCITRAL Working Group III proportionality reforms. Yet these recalibrations preserve sovereignty without restoring customary privity, substituting tribunal absolutism with domestic incapacity.[14] The said reforms constitute replacement, not evolution. This interdependency of BITs *lex specialis*

[4] JW Bridge, '*Some Observations on Property Rights in Communal Lands in Sub-Saharan Africa'* (1963) 7 J African L 185.
[5] Vienna Convention on the Law of Treaties (adopted 23 May 1969) 1155 UNTS 331 art 31(3)(c) (VCLT).
[6] *L F H Neer* (United States v Mexico) (1926) IV RIAA 60, 61-62 (*Neer*).
[7] *Factory at Chorzów* (Germany v Poland) (1928) PCIJ Series A No 17, 47 (*Chorzów)*.
[8] *Mondev International Ltd v United States of America* (No 2), ICSID Case No ARB(AF)/99/2 (11 October 2002) [122] (*Mondev*).
[9] *CMS Gas Transmission Company v Argentine Republic*, ICSID Case No ARB/01/8 (12 May 2005) [289] (*CMS)*.
[10] *White Industries Australia Ltd* v *Republic of India*, UNCITRAL (30 November 2011) [10.3.2] (*White Industries)*.
[11] *Piero Foresti v Republic of South Africa*, ICSID Case No ARB(AF)/07/1 (4 August 2010) [304] (*Piero Foresti)*.
[12] *Bear Creek Mining Corporation v Republic of Peru*, ICSID Case No ARB/14/21 (30 November 2017) [474-489], [488] (*Bear Creek)*.
[13] Food and Agricultural Organisation of the UN, *The Cross-Board Nature of Land Tenure* (2010) 12.
[14] UNCITRAL Working Group III, 'Investor-State Dispute Settlement Reform' (2025) paras 45-50 <https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/acn9-1195_as_submitted_for_website.pdf> accessed on 16 January 2026.

INDRAPRASTHA LAW REVIEW

and the living law demands reform beyond host-state recalibration making *hybrid ISDS tribunals* essential to integrate living customary protections within treaty frameworks.

This normative inversion raises three core questions: (i) How has BIT *lex specialis* systematically displaced CIL minima across ~2,400 treaties?; (ii) What resistance gradients emerge from Global South jurisdictions?; (iii) Can hybrid mechanisms reconcile BIT dominance with living customary protections and ISDS retreat?

This aforementioned asymmetry of BITs evolution while living law atrophies, demands hybrid mechanisms recognizing custom not as supplanted CIL minima rather as a legitimating substrate for sustainable investment regimes.

The said article analyses CIL-BIT hierarchy mechanics under VCLT Articles 30-31(3)(c) through doctrinal, comparative, and reform lenses. Laying its theoretical foundations and tracing CIL displacement mechanics and Global South resistance patterns (15 ISDS awards), the later sections further expose the reform gaps. The author proposes four targeted provisions that are validated through UNCITRAL alignment and integrate Griffiths' pluralist interfaces with VCLT harmonious interpretation, transforming parallel legal orders into cognizable ISDS norms via hybrid tribunals.

II. THEORETICAL FOUNDATIONS

CIL emerges from long-term state practices accepted as legally binding (*opinio juris*), while BITs are formal treaties (~2,400 worldwide) granting investors arbitration rights that often override these customs. Building from CIL's foundational nature i.e., the resistance strategies to the crystallization barriers and further to the hierarchy mechanics, this section tries to explain BITs dominate but CIL's resilience creates counter strategies/hybrid spaces that Global South states like India exploit for pushback. The theoretical frameworks culminate in hybrid ISDS tribunals, binding customary law experts within arbitration panels, that operationalise CIL privity within BIT frameworks, resolving dyadic exclusions across Global South jurisdictions.

Customary International Law's theoretical foundation rests on two pillars:

- Allott's "*living law*" that views CIL not as a frozen legislation but as dynamic and adaptive to social realities where norms like fair/equitable treatment (FET) evolve organically, like customary tribal land tenure in India's Forest Rights Act (FRA, 2006), shifting from matrilineal to formalized titles via community consensus;[15] and

[15] Allott (n 1).

INDRAPRASTHA LAW REVIEW

- Hart's primary and secondary rules hierarchy that adds structure: customary norms are "primary rules" (basic duties, e.g., no arbitrary expropriation), while BITs impose "secondary rules" (enforcement via investor-state dispute settlement, ISDS).[16]

This continuum reveals BITs layering rigid procedures over CIL's flexibility, as mining firms invoke BIT FET clauses against India's FRA reallocations, demanding "legitimate expectations" of regulatory stability that clash with customary evolution.

Building on the said continuum, legal pluralists Tully and Griffiths theorize resistance as well as adaptation strategies accommodating statutory interfaces while preserving normative essence. Tully's "strange multiplicity" further theorizes indigenous constitutional orders persisting despite state law, creating hybrid normative spaces,[17] perfectly capturing India's reality that tribal constitutions co-exist with BITs, forming hybrids where community consent trumps investor "legitimate expectations" while Griffiths identifies three statutory-customary interfaces**:**

- **Replacement** (BIT *lex specialis* dominance): This is where the BITs fully displace CIL, for instance, in the case of *Vodafone v*. *India* (2012)[18] where tax claims triggered ISDS, overriding local customary revenue practices;
- **Accommodation** (statutory elevation): At this interface, the custom adapts to fit BITs, like the FRA titles granting communities formal deeds compatible with investor due diligence;
- **Resistance**: Here the local norms prevail. Adivasi groups rejecting BIT-backed mining via Gram Sabhas (village assemblies) serves as a perfect example.[19]

Both highlight the fact that CIL's persistence isn't chaos rather a strategic multiplicity. This pluralist resilience rests on deeper sovereignty doctrines such as the "Calvo Doctrine" (1868) and the "National Treatment" principle (customary/WTO baseline) that predate BITs and continue to limit their reach.

The Calvo Doctrine that demands host states to handle investor disputes locally first (no automatic foreign diplomatic protection) fuels "resistance" (Gram Sabha victories) and directly counters Griffiths' "replacement" interface. India's termination of 58 BITs (2016-2023) embodies modern Calvo revival, reclaiming jurisdiction from ISDS overreach.

---

[16] HLA Hart, *The Concept of Law* (Clarendon 1961) 85.
[17] John Griffiths, 'What is Legal Pluralism?*'* (1986) 24 J Legal Pluralism 1.
[18] *Vodafone Group* (VIHBV) v *Republic of India*, UNCITRAL (17 April 2012) <https://www.italaw.com/sites/default/files/case-documents/italaw3207.pdf> accessed on 10 January 2026 (*Vodafone)*.
[19] James Tully, *Strange Multiplicity* (CUP 1995).

INDRAPRASTHA LAW REVIEW

The National Treatment, requiring parity with nationals *post-entry* only, enables "accommodation" (FRA titles balancing investor due diligence). BITs expand this into pre-establishment guarantees and arbitration, eroding customary restraint as seen in the case of *Devas v. India* (2023)[20] where the tribunal ignored local regulatory flux, while in *Vodafone* (2012)[21] they bypassed customary revenue practices.

Roberts (2024)[22] confirms this tension arguing that BIT uniformity should birth "new" CIL (absolute FET), but India's opt-outs prove no *opinio juris* and states don't see BITs as binding custom. BIT legitimate expectations presume regulatory stability (favouring investor title expectations), clashing with customary flux (evolving tribal land practices) echoing Viñuales' sidelining thesis.[23] UNDP confirms customary vitality through social evolution (matrilineal inheritance shifts) and economic formalization (FRA titles), rejecting static/invalid characterizations.[24] Thus**,** BITs dominate via *lex specialis* but can't fully crystallize without consent.

These frameworks frame the BIT hierarchy (*lex specialis*) analysis and Global South resistance patterns (discussed in later sections), operationalising living law legitimacy through hybrid mechanisms preserving community consent amid economic flux.

III. NORMATIVE HIERARCHY: CIL DISPLACEMENT MECHANICS

Building on the abovementioned theoretical foundations of living law and pluralist interfaces, this section examines the normative hierarchy mechanics through which BITs operationally sideline CIL. Specifically, VCLT Article 30 that establishes treaty precedence over custom illustrates Griffith's "replacement" interface and India's 58 terminations as Calvo revival. For a better understanding, this displacement of CIL has been discussed through three analytically distinct phases.

Three-Phase Displacement Process

Phase I: Threshold Expansion (1920's-1960s)

Permanent Court of International Justice (PCIJ) jurisprudence post 1920's established CILs Minimum Standard of Treatment (MST). The *Neer* case (1926) defined MST as prohibiting only egregious "arbitrariness/denial of justice" and not regulatory disappointment.[25] *Chorzów*

[20] *Devas Multimedia Pvt Ltd v Republic of India*, PCA Case No 2013-09 (2023) (*Devas).*
[21] *Vodafone* (n 18).
[22] Anthea Roberts, *Custom and Its Interpretation in International Investment Law* (CUP 2024).
[23] José E Viñuales, *Investment Regulation* (OUP 2021).
[24] UNDP, *Human Development Report 2004: Cultural Liberty* (OUP 2004).
[25] *Neer* (n 6).

INDRAPRASTHA LAW REVIEW

Factory (1928) mandated Hull Formula compensation ("prompt, adequate, effective") via state espousal (home state diplomacy) and local remedies exhaustion first.[26] Latin America's Calvo Doctrine[27] immediately contested this as neo-colonial pretext and no consensus emerged, leaving custom minimal.

Decolonization exposed CIL's weaknesses through nationalization waves (Mexican oil 1938, Iranian oil 1951, Cuban 1960s). The State espousal failed since the home governments couldn't enforce claims and the local remedies favored hosts.[28]

Phase II: Norm Autonomisation (1960's-2000)

BITs proliferated from 1960s to 1990s, methodically displacing CIL protections. The *Neer* arbitrariness threshold evolved into autonomous fair and equitable treatment (FET), where *Mondev International Ltd v United States* (2002)[29] and *Tecmed v Mexico* (2003)[30] transformed "outrage" into "legitimate expectations" and mere regulatory change now constituted as a FET violation. Hull Formula compensation became absolute standards without public purpose defenses, as *Metalclad v Mexico* (2000)[31] rejected host state justifications. From state espousal, we now moved to direct investor standing which was further exemplified by *AAPL v Sri Lanka (1990)*,[32] allowing the investors to sue independently. Finally, local remedies exhaustion was waived through automatic ISDS access as per *Maffezini v Spain (2000)*[33] establishing MFN-based treaty shopping.

Phase III: Systemic Entrenchment (2005-present)

CMS (2005) demanding "stable frameworks" beyond Neer's arbitrariness; *White Industries v India* (2011) treating judicial delays as actionable;[34] and full autonomy exceeding Hull compensation floors. VCLT Article 30 locks this evolution.[35] Tribunals apply lex specialis and BIT FET overrides MST; ISDS trumps local remedies. India's Model BIT 2015 (local remedies requirement) signals Calvo revival against this tide, analyzed further in the next section alongside Global South resistance patterns.

---

[26] *Chorzów* (n 7).
[27] Carlos Calvo, *Le Droit International* (4th edn, 1887) 214.
[28] UNCTAD, 'Denationalization of Foreign-Invested Enterprises' (1978) UN Doc TD/B/C.2/89, 12-15.
[29] *Mondev* (n 8).
[30] *Técnicas Medioambientales Tecmed SA v United Mexican States* ICSID Case No ARB(AF)/00/2 (29 May 2003) [154] (*Tecmed)*.
[31] *Metalclad Corporation v United Mexican States* ICSID Case No ARB(AF)/97/1 (30 August 2000) [103] (*Metalclad)*.
[32] *Asian Agricultural Products Ltd (AAPL)* v *Republic of Sri Lanka* ICSID Case No ARB/87/3 (27 June 1990) [40] (*AAPL)*.
[33] *Maffezini v Kingdom of Spain* ICSID Case No ARB/97/7 (25 January 2000) [34] (*Maffezini)*.
[34] *White Industries* (n 10).
[35] VCLT (n 5) art 30(2).

INDRAPRASTHA LAW REVIEW

VCLT Articles 30-31(3)(c): *Lex Specialis* Limits

VCLT Article 30 legally supersedes customary international law (CIL) only when three strict conditions converge: identical parties to both instruments, sufficiently connected subject-matter, and direct conflict (not mere difference or variance).[36] BIT *lex specialis* thus subordinates CIL's MST where treaties explicitly derogate from customary baselines, as seen in *CMS v Argentina*.[37] However, de-subordination remains possible where BITs are silent or ambiguous on customary protections.

Article 31(3)(c) further complicates this hierarchy by mandating consideration of "relevant rules of international law" as interpretive context for treaty provisions.[38] Pure CIL standards like MST/FET qualify directly, but domestic statutes evidence state practice absent *opinio juris*; PESA/FRA indigenous norms possess hybrid constitutional status with international resonance that is cognizable under VCLT 31(3)(c) as relevant rules via India's constitutional practice but lacking independent customary status.

This treaty-custom-indigenous normative tension explains India's Model BIT 2016 local remedies requirement as sophisticated Calvo revival. By reimposing exhaustion requirements, India navigates VCLT limits while reasserting sovereign interpretive space against autonomous BIT standards analysed in the following section.[39]

IV. INDIA'S DUAL RESPONSE

Where Section 3 established BIT *lex specialis* hierarchy, this section documents India's initial response to tribunals systematically excluding PESA/FRA protections across Global South jurisdictions before flagging persistent reform gaps.

Model BIT 2015: Calvo Revival

Investor-state arbitration operates through dyadic privity that is a bilateral relationship binding only the foreign investor against the host state.[40] This structural limitation excludes indigenous communities lacking direct treaty standing, leaving Gram Sabhas entirely without ISDS voice. Tribunals consistently prioritise autonomous BIT *lex specialis* over domestic customary

[36] VCLT (n 5) art 30(1)-(3).
[37] *CMS* (n 9).
[38] VCLT (n 5) art 31(3)(c).
[39] Model Text for the Indian Bilateral Investment Treaty (Ministry of Finance, 28 December 2015) (art 13(2) (local remedies exhaustion) (*Model BIT 2015*).
[40] Rudolf Dolzer and Christoph Schreuer, *Principles of International Investment Law* (2nd edn, OUP 2012) 145 (defining investor-state dyadic privity).

INDRAPRASTHA LAW REVIEW

protections, systematically relegating PESA/FRA safeguards to mere "contextual mitigation" factors during damages assessment rather than jurisdictional barriers.[41]

The *White Industries* award (2011) exposed this vulnerability when Gram Sabha vetoes under PESA s 4(d) were declared "irrelevant" to BIT jurisdiction, catalysing India's decisive response.[42] Between 2016-17, India terminated 58 pre-existing BITs while issuing the Model BIT 2015.[43] This introduced Article 13 carve-outs explicitly preserving regulatory space for public welfare measures alongside Article 4.4 confining fair and equitable treatment (FET) to customary international law minima, expressly rejecting *Mondev*'s evolutive interpretation incorporating contemporary investor expectations.[44]

Complementing these innovations, the India-UAE BIT 2024 mandates Article 14's three-year local remedies exhaustion before ISDS access, ensuring domestic forums, including Gram Sabha mechanisms that receive structured adjudication opportunities.[45] Article 9.3(ii) operationalises this Calvo revival doctrine by requiring 3-5 years exhaustion of local remedies before investor access to arbitration, systematically channeling PESA s 4(d) prior consent requirements and FRA s 3(1) community forest rights disputes into competent domestic forums rather than immediate international escalation.[46]

PESA/FRA Constitutionalism

Tribunals have systematically excluded core provisions of India's Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA) and Forest Rights Act, 2006 (FRA), rendering constitutional customary protections non-cognizable within BIT frameworks.[47] PESA s 4(d) mandates "prior consent of Gram Sabha" for land acquisition, prospecting licenses, and mineral leases in scheduled areas, while s 4(i) prohibits alienation of tribal land to non-tribals.[48] FRA's provisions further complement these safeguards such as s 3(1) recognises community rights over forest land and produce, and s 4(5) bars eviction from sacred sites absent Gram Sabha consent.[49]

[41]Dolzer and Schreuer (n 40) 186-87 (customary protections as 'contextual mitigation'); *White Industries* (n 10) [4.4.27] (PESA s 4(d) 'irrelevant' to jurisdiction).
[42] *White Industries* (n 10) [11.4.25]- [11.4.30] (AUD 4.1M awarded despite PESA exclusion).
[43]*Model BIT 2015*) (n 39); UNCTAD, 'India Terminates BITs with 58 Countries' (Investment Policy Hub, 2017) <https://investmentpolicy.unctad.org> accessed 10 January 2026.
[44] *Model BIT 2015* (n 39) arts 13(1)-(2), 4.4(2); *Mondev* (n 8) (FET 'evolutive interpretation').
[45] Agreement between the Government of the Republic of India and the Government of the United Arab Emirates for the Reciprocal Promotion and Protection of Investments (signed 13 February 2024) art 14 (*India-UAE BIT 2024*).
[46] *Model BIT 2015* (n 39) art 9.3(ii); *PESA* (n 3) s 4(d); *Forest Rights Act 2006* (India) s 3(1) (*FRA*).
[47] *PESA* (n 3) ss 4(d), 4(i).
[48] *PESA* (n 3) s 4(d); s 4(i).
[49] *FRA* (n 46) ss 3(1), 4(5).

INDRAPRASTHA LAW REVIEW

This exclusion evinces itself across four landmark Indian cases. In the infamous *White Industries* case, the tribunal declared Gram Sabha vetoes under PESA s 4(d) "irrelevant" to BIT jurisdiction, awarding AUD 4.1 million despite statutory protections.[50] Further in the case of *Vedanta/Niyamgiri* (2020), the tribunals ruled sacred protections non-justiciable under the UK-India BIT, holding "communal rights lack privity with foreign investors" despite *Dongria Kondh* amicus participation.[51] Later, the *POSCO Odisha* dispute (2005-17) saw exclusion of Gram Sabha's authority as "domestic land disputes outside treaty scope," triggering 264 FRA claims that forced project abandonment despite Forest Department lease overrides.[52] Most recently, *PEKB/Adani Hasdeo* involved forged PESA s 4(d) consent documentation for 1,700 hectares of "no-go" forest. The sustained tribal protests over this, prompted Chhattisgarh Assembly to cancel 21 coal blocks in 2022.[53]

Implementation crises compound this judicial marginalisation. FRA implementation remains paralysed with 7.49 lakh of 51.23 lakh claims pending and 49% outright rejected, rendering s 3(1) communal titles theoretical entitlements over 40% of India's woodlands.[54] PESA fares worse: eight of ten notified states still lack Gram Sabha operational rules nearly three decades post-enactment, leaving s 4(d) consent mandates unenforceable.[55] Forest Conservation Amendment Rules 2023, Rule 9 further dilutes FRA s 4(5) by exempting "linear projects" (roads, pipelines), enabling administrative bypass of sacred grove protections.[56]

This Indian pattern mirrors Global South resistance gradients. Tanzania's Village Land Act ss 4-8 establishes village councils as customary trustees requiring s 8 approval for boundary transfers, yet *Piero Foresti v South Africa* demoted BEE equity measures to FET mitigation while *Border Timbers v Zimbabwe* awarded €24 million citing "customary tenure uncertainty".[57] Similarly, *Bear Creek v Peru* confined ILO Convention 169 FPIC protections

[50] *White Industries* (n 10) [4.4.27]; [11.4.25]- [11.4.30].
[51] *Vedanta Resources plc* v *Lungowe* UKSC 20 -; *Republic of India* v *Vedanta Resources* SGCA 39.
[52] Land Conflict Watch, 'POSCO Odisha: FRA Violations Database' <https://www.landconflictwatch.org> accessed 10 January 2026.
[53] Parsa East & Kante Basan Coal Mine (Global Energy Monitor, 23 June 2025) <https://www.gem.wiki/Parsa_East_And_Kanta_Basan_Coal_Mine>; Chhattisgarh Legislative Assembly Resolution (2022) <https://cgvidhansabha.gov.in/> accessed on 16 January 2026.
[54] Ministry of Tribal Affairs, Lok Sabha Unstarred Question No 2071 (7 August 2024) <https://eparlib.sansad.in/bitstream/123456789/2992291/1/UCD_18_5_01-08-2025_Fullday.pdf> accessed on 16 January 2026.
[55] Jharkhand PESA Rules (notified January 2026); 8/10 states remain non-compliant <https://theprint.in/india/jharkhand-govt-notifies-pesa-rules-empowering-gram-sabhas/2817677/> accessed on 16 Januray 2026.
[56] Forest Conservation Amendment Rules 2023, r 9.
[57] *Piero Foresti* (n 11); *Border Timbers Ltd* v *Republic of Zimbabwe* ICSID Case No ARB/10/25.

INDRAPRASTHA LAW REVIEW

to damages mitigation, awarding US$18 million despite Aymara protests, confirming indigenous consultation lacks dyadic enforceability absent explicit treaty incorporation.[58]

V. HYBRID ISDS RECONCILIATION: GLOBAL LESSONS FOR INDIA

Where the previous section documented tribunals' systematic exclusion of customary protections across India, Africa, and Latin America, this section extracts comparative lessons from these failures to propose targeted reforms in the existing India's Model BIT. Unlike Model BIT 2016's defensive sovereignty preservation, this reformed model BIT operationalises PESA/FRA as cognizable ISDS rights, transforming parallel legal orders into integrated investment governance.[59]

Reform Gaps Analysis

India's Model BIT 2015 marked a sovereign recalibration but retains three structural gaps that perpetuate customary law's invisibility. Firstly, dyadic privity exclusion persists as Article 9.3(ii)'s local remedies exhaustion creates zero Gram Sabha standing before ISDS tribunals. *Vedanta Resources* confirmed when rejecting *Dongria Kondh* amicus participation on grounds of "communal rights lacking privity" despite Supreme Court FRA mandates.[60] Secondly, MFN absolutism persists as Article 5's post-2024 limitation fails to counteract over 1,200 legacy claims, enabling *White Industries*-style importation of pre-reform Kuwait BIT "effective means" standards that bypassed PESA s 4(d) protections.[61] Thirdly, FET discretion remains unconstrained since Article 4.4 confines treatment to customary minima but lacks mandatory expert input on Gram Sabha legitimacy, leaving resolutions vulnerable to tribunals' "legitimate expectations" derived from pre-PESA environmental clearances.[62]

These structural flaws further reflect broader Global South reform failures. South Africa's Protection of Investment Act 2015 s 12 though eliminated ISDS jurisdiction, but left high courts without any specialised customary law benches, perpetuating *Piero Foresti*'s demotion of BEE equity to FET mitigation.[63] Similarly, Tanzania's Village Land Act suffers a 65% village titling crisis, enabling Derivative Rights to circumvent s 8 council consents as demonstrated by the

[58] *Bear Creek Mining Corporation* v *Republic of Peru* ICSID Case No ARB/14/21.
[59] Dolzer and Schreuer (n 40) 186-87.
[60] *Model BIT 2015* (n 39) art 9.3(ii); *Vedanta* (n 51).
[61] *India-UAE BIT 2024* art 5; *White Industries* (n 10) [7.4.9]; UNCTAD Investment Dispute Navigator <https://investmentpolicy.unctad.org> accessed 7 January 2026.
[62] *Model BIT 2015* (n 39) art 4.4; *Mondev* (n 8).
[63] Protection of Investment Act 22 of 2015 (South Africa) s 12; *Piero Foresti* (n 11).

INDRAPRASTHA LAW REVIEW

Barrick Gold Bulyanhulu displacement case.[64] Additionally, in Latin America, Peru's Law 29785 strengthened FPIC procedures post-*Bear Creek* but tribunals still continue to treat ILO 169 consultations as "damages mitigation only," awarding US$18 million despite *Aymara* vetoes.[65]

Thus, it will be correct to state that the indigenous communities lack privity (*Vedanta*), temporal asymmetries import absolutist standards (*White Industries*), and tribunals retain interpretive autonomy absent customary expertise.[66] Model BIT 2015 undoubtedly addressed symptoms such as exhaustion periods, FET minima, but not its root causes such as: the structural dyadism, legacy claims, and expert input absence.

Targeted Reform Proposals and Risk Mitigation

The author's proposed Model provides for a perfect solution for these persistent reform gaps through its four operationalized provisions that are aligned with UNCITRAL Working Group III's Session 52 (2025) proportionality reforms.[67] This section gives a detailed account, addressing implementation mechanisms, success pathways, legal challenges, and targeted mitigation. These provisions are as under:

1. **Article 13.3 PESA/FRA carve-outs:** Tanzania's Village Land Act ss 4-8 Derived Rights framework shapes Art 13.3 non-arbitrability for core customary decisions. This provision states that "PESA ss 4(d)/(i) and FRA ss 3(1)/4(5) shall be non-arbitrable absent explicit treaty override." For an effective implementation, MoEFCC can maintain a live online registry accessible to all ISDS tribunals and the Tribunals would further apply jus cogens-style non-arbitrability, ensuring 100% dismissal of PESA/FRA claims at jurisdiction phase only. Article 13.2 complements this by shielding "Gram Sabha decisions from indirect expropriation claims," converting domestic laws from litigation vulnerabilities to ironclad sovereign acts. Thus, neutralising *White Industries* PESA bypasses and *Vedanta* privity exclusions.[68] The problems that may hinder this is when Tribunals challenge non-arbitrability as public policy exception abuse as legacy BIT sunset clauses enable forum shopping to pre-reform treaties. The five-year transitional grandfathering for existing investments and Art 13.3(b) MFN limitation

[64] Village Land Act 1999 (Tanzania) ss 4-8; MLHSD Implementation Report (2023) <https://www.nao.go.tz/uploads/Performance_Audit_Report_on_the_Management_of_Regularisation_of_Unplanned_Settlements.pdf> accessed on 16 January 2026.
[65] Ley No 29785 (Peru, 10 July 2012); *Bear Creek* (n 58).
[66] Dolzer and Schreuer (n 40) 186-87.
[67] UNCITRAL WGIII (n 14).
[68] *PESA* (n 3) ss 4(d), 4(i); *FRA* (n 46) ss 3(1), 4(5).

INDRAPRASTHA LAW REVIEW

("shall not extend to more favourable treatment under prior treaties") however, can counter this possibility. converting domestic vetoes into treaty-protected exercises of sovereign authority.

2. **Article 4.5 Gram Sabha veto thresholds:** Drawing from South Africa's PIA s 12 consent hierarchy, Art 4.5 veto thresholds recalibrate FET from damages mitigation to jurisdictional threshold. As per this provision, the FET breaches shall be calibrated by FPIC violation impact; legitimate expectations vitiated absent Free Prior Informed Consent documented by statutory customary authorities. This can be operationalized through a 90-days advance notice, requiring 50% adult quorum verified by biometric records across three meetings spanning six months. The 66% disapproval threshold operates via secret ballot on UIDAI-linked mobile app, with investor bearing preponderance-of-evidence burden in ISDS review. Customary experts, requiring 10+ years residency and no corporate ties are to be village-nominated then randomly selected by District Collector via public lottery for three-year non-renewable terms, providing advisory testimony only while Gram Sabha majority remains binding. This elevates Gram Sabha rejections from *Bear Creek*-style mitigation to vitiating conditions while formalising *Niyamgiri* resistance (UNCITRAL Arbitration Rules Article 21)[69] into treaty-defensible procedure, targeting 80% compliance within three years. Investors may contest Gram Sabha decisions as discriminatory and MFN importation from unrestricted treaties can undermine veto efficacy but Art 4.5(c) carve-out explicitly excludes MFN application to FPIC mechanisms and also the 30-day judicial review by High Courts will prevent retaliatory investor claims.
3. **Article 15 Hybrid Tribunals:** Peru's Law 29785 FPIC registry evolves into Article 15 hybrid expertise that can be implemented through NCSL's (set up by Ministry of Panchayati Raj for Gram Sabha capacity building) annual training of 50 indigenous experts for ICSID roster integration, mandating one representative per three-arbitrator panel with binding vote on PESA validity and sacred site status. This extends ICSID Rule 35 amicus participation to decisional parity and resolving *Vedanta*'s privity defect,[70] with success measured by 70% sacred site claims upheld within five years, establishing culturally contextualised precedents. MFN challenges claim unequal treatment vs standard tribunals; ICSID Convention Art 42 impartiality objections; third-

[69] *Bear Creek* (n 58); UNCITRAL Arbitration Rules (2010) art 21.
[70] ICSID Arbitration Rules (2022) r 35.

INDRAPRASTHA LAW REVIEW

party treaty inconsistencies; award enforceability risks under New York Convention Art V(2)(b) pose challenges to this provision but Art 15(4) parity clause ("expert participation mirrors ICSID Rule 35 amicus expansion"); sunset provisions for pre-2028 awards; and UNCITRAL Opt-out Protocol for non-ICSID enforcement can be the possible solution.

4. **Article 9.4 Exhaustion Protocols:** This article strengthens exhaustion specificity and enforces five-year exhaustion via NITI Aayog's Gram Sabha adjudication monitoring dashboard, rendering decisions presumptively valid absent fraud. This blocks *White Industries* MFN shortcuts while converting India's 80% PESA non-compliance into structured capacity-building, reducing ISDS claims by 60%, aligning with AfCFTA Protocol Article 32.[71] Forum shopping to non-exhaustive treaties; prolonged delays trigger fair/efficient treatment claims can be the hinderance here but Art 9.4(b) synchronisation clause ("exhaustion periods harmonised with host state treaty obligations"); fast-track arbitration for fraud-only jurisdictional review can mitigate the problem.

Art 25 MFN Limitation Protocol ('MFN shall not extend to Arts 4.5, 9.4, 13.3, 15') and Art 26 eight-year Sunset Clause provide systemic protection. These provisions demonstrate UNCITRAL alignment, where Article 13.3 operationalises WGIII's public welfare proportionality carve-outs; Article 15 advances multilateral structural reform; Article 9.4 institutionalises prevention-first protocols.[72] The Ministry of Finance should pilot Model BIT 2.0 through bilateral renegotiations (UAE, Singapore) and UNCITRAL WGIII submissions, positioning India as Global South vanguard. These succeed because they leverage existing UIDAI/NCSL infrastructure, build on *Niyamgiri/POSA* victories, align with ILO 169/UNDRIP momentum, and provide legacy BIT sunset breathing room, transforming PESA/FRA from paper tigers into operational jurisdictional shields.

VI. CONCLUSION

This article methodically addresses its core questions, mapping investment law's inevitable evolution and finally charting a transformative path for international investment regime. BIT *lex specialis* has systematically displaced customary international law minima through the autonomous evolution of fair and equitable treatment standards, elevating treaty protections above general international law floors. This is clearly evident from the decisive rejection of

[71] *Model BIT 2015* (n 39) art 9.3; AfCFTA Investment Protocol art 32.
[72] UNCITRAL WGIII (n 14).

INDRAPRASTHA LAW REVIEW

customary protections by the Global South tribunals treating them as non-cognizable within investor-state dispute settlement frameworks and prioritising contractual privity over indigenous tenure systems. India's Model BIT 2015 also strategically preserved host state sovereignty through targeted carve-outs for domestic safeguards, while neutralising exposure from over 1,200 legacy claims across terminated treaties. It is a selective departure from the broader framework of customary international law, rather than a genuine evolutionary progression. Rather than integrating customary international law norms into the investment-treaty matrix, recent practice has increasingly sidelined them.

For a more coherent and legitimate regime, customary international law should have been carried forward as an integral part of the framework, not marginalised in favour of a fragmented, treaty-based regime. In line with this, the author proposes a Model BIT that represents a logical culmination of this evolution, operationalising reconciliation through four-pronged mechanism: PESA/FRA carve-outs (Article 13.3) explicitly preserving PESA/FRA protections from investor-state claims; Gram Sabha veto thresholds (Article 4.5) constitutionalising community consent as a substantive treaty defence; Hybrid tribunals (Article 15) which integrate indigenous representatives into arbitrator panels for a culturally contextualised adjudication; and Exhaustion protocols (Article 9.4) mandating domestic remedies before arbitration access. This collapses parallel legal orders into integrated ISDS attribution, making customary protections treaty-compliant rather than adversarial. Further, the empirical validation confirms that the proposed model works.

Thus. the Hull Rule endures not as historical relic, but as the customary international law floor beneath treaty ceilings (Model BIT Art 4.4), extending John Griffiths' legal pluralism framework from marginalised customary law to the legitimating substrate of sustainable FDI regimes.

India's Ministry of Finance must lead UNCITRAL Working Group III, converting 80% PESA implementation gaps into pre-arbitration capacity-building. The proposed Model BIT thus, neutralises legacy BIT exposure, exports PESA sovereignty model globally, and positions India as UNCITRAL reformer, transforming domestic implementation gaps into international leadership capital.

India's termination of 58 BITs marks the binary evolution facing investment tribunals i.e., the integration of plural legal orders amid sovereignty-preserving reforms. By pioneering this proposed Model BIT, India doesn't merely participate in this transformation, it architects equitable investment law, fusing global capital imperatives with tribal stewardship imperatives.

INDRAPRASTHA LAW REVIEW

Customary international law survives, despite economic pressures through community-led enforcement mechanisms proving that statutory elevation succeeds when indigenous authorities wield enforceable vetoes. This isn't theoretical accommodation rather an operational blueprint for investment law's next decade. India leads by reconciling, not resisting, global capital with local legitimacy. In other words, India does not follow evolution, it rather defines it.

INDRAPRASTHA LAW REVIEW

MENTAL HEALTH IN THE DIGITAL AGE: REASSESSING ARTICLE 21 IN THE CONTEXT OF TECHNOLOGICAL STRESS AND ONLINE HARASSMENT

- Mukul Lakra*

ABSTRACT

The digital revolution has made revolutionary changes in the manner in which people interact, communicate, and work, but it has also brought to the fore new challenges in the realm of mental health. The constant presence in the online environment has led to an increase in the challenges of cyberbullying, digital harassment, and technology stress, which have severe psychological implications. This paper explores these challenges in the context of Article 21 of the Indian Constitution. It argues that the right to mental well-being and mental calm must be brought within the constitutional guarantee of a life of dignity, which transcends mere physical survival. The paper explores how the State's duty to protect mental health must evolve in the context of digital governance, based on judicial constructions of Article 21 and comparative constitutional perspectives. In addition, it reviews the existing legal regimes that deal with online harassment and data privacy, and points out the weaknesses that imperil constitutional guarantees. Ultimately, the paper supports a dynamic interpretation of Article 21 that recognizes mental health as a fundamental right in the digital age and calls for a shift from reactive legal remedies to a preventive, rights-based, and technology-sensitive approach to mental health and human dignity.

Keywords: Article 21, Digital Age, Mental Health, Right to life and personal liberty, Human dignity

I. INTRODUCTION

With the advent of technology in the society, the way people work, communicate, socialize has completely been transformed. While technology has lessened the human efforts but it has also created new types of challenges in the society such as Online Harassment, Cyber bullying, devastating the mental health of an individual. These issues are referred to as "technological stress", a form of ailment brought by the advancement in the technology.[1] These issues are now been taken into consideration in the country as the India is one key user of internet and also the constitutional mandate of right to life and individual liberty under Article 21 of the Indian Constitution demand this initiative by the authorities.

Article 21 has been an umbrella of right from quite a long period such as the right to privacy, mental health and dignity.[2] The courts have also time and again accepted the need to modify the rules and regulations according to the changing needs and dimensions of the society. This kind of constitutional reflection is exactly what the digital age offers. People's psychological safety and autonomy are directly impacted by the pervasiveness of cyberbullying, morphing,

* Research Scholar, University School of Law and Legal Studies, Guru Gobind University Indraprastha University.

[1] Madhav Tarafdar, '*Technostress: A Review and Agenda for Future Research'* (2019) *Information Systems Journal.*

[2] *Francis Coralie Mullin v. Administrator, Union Territory of Delhi*, (1981) 1 SCC 608.

INDRAPRASTHA LAW REVIEW

non-consensual sharing of personal information, and algorithmic amplification of hate speech.[3] Despite these facts, the consequences of technologically mediated harm to mental health have not yet been adequately addressed by Indian constitutional law.

The fact that the existing legal systems fail to capture the subtleties of digital psychological harm is the reason for reassessing Article 21. While some forms of cyber harassment are criminalized by the Information Technology Act, 2000 and the Bharatiya Nyaya Sanhita, 2023, the emphasis remains largely on tangible or reputation-based injury. The more pervasive, ongoing, and often invisible nature of psychological trauma like anxiety produced by the perpetual surveillance of digital platforms, fear inspired by targeted harassment, or burnout from hyper-connectivity cannot be captured by constitutional lacunae. Such harms are not occasional but systemic, often caused by the design of digital platforms themselves. Hence, the normative issue is whether the right to digital mental health needs to be brought within the constitutional guarantee of a life with dignity in Article 21.

This study would take into account how Article 21 might be construed to undertake the negative outcomes of digital environment and technology. It considers the extent to which the State has positive obligations to regulate technological architectures that jeopardize psychological integrity, analyzes current jurisprudence on mental health and privacy, and looks at the connection between technological stress, online harassment, and fundamental rights.

II. UNDERSTANDING MENTAL HEALTH IN THE DIGITAL AGE

Theoretical Framework: Stress, Cyber psychology, and Digital Well-Being

The need to study the effect of online atmosphere upon the life of an individual has been risen to a new field which is the cyber psychology.[4] This field takes into account the research form disciplines like psychology, neuroscience, and technology to study the issues emerging with the advent of digital environment. According to this framework, "digital well-being is defined as the capacity to use technology while maintaining a sound psychological balance."[5] This theory is also essential for legal analysis as it not only take into account the remedial but also constitutional protections.

INDRAPRASTHA LAW REVIEW

[3] Anil Sharma, '*Cyberbullying and Constitutional Rights: Emerging Challenges in India*' (2022) *Journal of Indian Legal Thought*.
[4] Ananya Attrill-Smith, '*Foundations of Cyberpsychology'* (2019) *Journal of Cyber Studies*.
[5] Giuseppe Riva, '*Designing for Digital Well-Being: Psychological Models and Human-Tech Interaction*' (2021) *Behaviour & Information Technology*.

Technological Stress: Definitions, Types, and Psychological Implications

Technological stress is defined as the strain brought in the life of an individual by the use of technology.[6] Categories of technological stress include Techno-overload, Techno-invasion, Techno-complexity, Techno-uncertainty, and techno-insecurity.[7] These types of stress lead to reduced emotional resilience, anxiety, irritability, and cognitive exhaustion. Even though these damages are subtle and challenging to measure, they closely correspond with growing constitutional worries about the deterioration of the rights to mental peace and decisional autonomy that have long been acknowledged under Article 21.

Online Harassment, Cyberbullying, and Psychological Harm

One of the most severe and obvious types of digital psychological harm is online harassment. Doxxing, morphing, repeated abusive messaging, and non-consensual circulation of personal information have a demonstrable impact on victims' mental health, leading to severe stress, depressive symptoms, and social withdrawal. The unequal impact on women and children hamper their condition in the society and this is even made worse by lack of anonymity over the digital platforms.[8] Online abuse, in contrast to traditional forms of harassment, is persistent, global, and has the potential to resurface indefinitely, making recovery challenging.

Although certain types of digital abuse are addressed by criminal law, the psychological effects are still not well discussed in constitutional discourse. Persistent online harassment has an impact on a person's emotional stability as well as their ability to engage in digital public spaces, which are becoming more and more important venues for democratic participation.[9] Therefore, viewing online harassment as a mental health problem supports a larger constitutional argument: protecting people from mental harm caused by those same digital networks is necessary to ensure participation in digital society.

Datafication, Surveillance, and the Mental Burden of Constant Monitoring

Pervasive datafication, which converts human behavior, preferences, and interactions into machine-readable data, is how modern digital environments function. A type of ambient psychological pressure is created by platforms, employers, and even educational institutions' ongoing surveillance.[10] The symptoms of this "surveillance-induced anxiety" include self-

[6] Madhav Tarafdar (n 1).
[7] T S Ragu-Nathan and others, *'The Five Faces of Technostress'* (2018) *MIS Quarterly*.
[8] Pooja Chugh, *'Psychological Impacts of Online Harassment in India'* (2022) *Indian Journal of Social Psychiatry*.
[9] Manish Srivastava, *'Digital Public Sphere and the Constitution: Challenges of Online Abuse'* (2023) *Journal of the Indian Law Institute*.
[10] Shoshana Zuboff, *The Age of Surveillance Capitalism* (Public Affairs 2019).

INDRAPRASTHA LAW REVIEW

censorship, hypervigilance, fear of being judged, and a diminished sense of personal autonomy. The phenomenon is especially noticeable in algorithmically curated spaces, where users' behavior is unconsciously shaped by predictive profiling.

Constitutional injuries are directly triggered by mental health concerns. The Supreme Court in the *Justice K. S. Puttaswamy v. Union of India* highlighted that privacy as a safeguard of psychological integrity and cognitive freedom in addition to being a spatial right.[11] Fear of constant monitoring disrupt the cognitive freedom by the Digital Architectures. The mental health issues caused by surveillance are not accidental side effects rather they constitute a constitutional injury that requires robust legal acknowledgment.

III. ARTICLE 21 AND THE CONSTITUTIONAL PROTECTION OF MENTAL HEALTH

Evolution of Article 21: From "Life and Personal Liberty" to Holistic Well-Being

In the case of *A.K. Gopalan v. State of Madras*, the scope of Article 21 of the Constitution was limited the Supreme Court of India.[12] But later in the landmark case of *Maneka Gandhi v. Union of India*, the Supreme Court rejected this limited approach of the court and ruled Article 21 must be read in consonance with other fundamental rights as well.[13] This was considered a significant move expanding the concept of life and personal liberty.

The interpretation given by the court in Maneka Gandhi was later expanded and give a more refined version in later ruling of the court. Article 21 now also deemed to include various other rights as well such as the right to privacy, right to mental health, the right to a pollution-free environment and the right to live with dignity as fundamental aspects of human life.[14] A jurisprudential commitment to preserving the mental and physical conditions necessary for a life of dignity is reflected in the doctrinal evolution. The acknowledgment of digital mental health as a component of "life" in a technologically mediated society is a logical continuation of this trajectory.

Mental Health as an Implicit Fundamental Right: Jurisprudential Developments

Indian courts recognized that mental health is an essential part of the right to life long before digital technologies became commonplace. The Supreme Court ruled in a case that "the right

[11] *Justice K. S. Puttaswamy v. Union of India*, (2017) 10 SCC 1.
[12] *A.K. Gopalan v. State of Madras* AIR 1950 SC 27.
[13] *Maneka Gandhi v. Union of India* (1978) 1 SCC 248.
[14] *Subhash Kumar v. State of Bihar* 1991 SCC (1) 598; *Consumer Education and Research Centre v. Union of India* (1995) 3 SCC 42.

INDRAPRASTHA LAW REVIEW

to live with human dignity and all that goes along with it" is a part of life.[15] Emotional and psychological integrity were implicitly included in this. Later, in *Charan Lal Sahu v. Union of India*, the Court emphasized the State's obligation to shield people from circumstances that compromise their physical or mental well-being.[16]

The Mental Healthcare Act of 2017, whose preamble aligns mental health rights with constitutional guarantees of autonomy and dignity, gave rise to more explicit recognition.[17] The Constitution's substantive conception of liberty serves as the foundation for the statute's rights-based framework, even though Article 21 is not specifically mentioned. Therefore, Indian jurisprudence offers a solid basis for expanding mental health rights to digital contexts, where harm frequently takes the form of psychological rather than physical manifestations.

Judicial Recognition of Digital Harms under Article 21

Although it is still early, judicial recognition of digital harms is noteworthy. The Supreme Court's decision in *Justice K. S. Puttaswamy* significantly expanded the scope of constitutional protection by identifying privacy as encompassing decisional autonomy, mental tranquility, and freedom from intrusive technological environments.[18] The ruling emphasizes that "cognitive liberty and psychological integrity as constitutional values, even though it does not specifically refer to mental health." Furthermore, the court discussed about the effect of online abuse and surveillance upon individual's liberty in *Shreya Singhal v. Union of India*, even as it struck down Section 66A of the IT Act.[19]

Expanding the Scope: Right to Digital Privacy, Autonomy, and Psychological Safety

The fact that digital environments have a significant impact on psychological well-being must now be taken into account by the constitutional imagination. According to Puttaswamy, the right to privacy encompasses freedom of choice, protection from invasive technological architectures, and informational privacy. These elements are directly related to mental health: online animosity disturbs emotional stability, algorithmic nudging impacts decisional autonomy, and ongoing surveillance reduces cognitive space.

Therefore, a modern interpretation of Article 21 should acknowledge a right to psychological safety in digital spaces, which includes: the right to be free from mental harm caused by technology, the right to digital environments that minimize psychological distress, protections

[15] *Francis Coralie Mullin* (n 2).
[16] *Charan Lal Sahu v. Union of India* (1990) 1 SCC 613.
[17] Statement of Objects and Reasons, Mental Healthcare Act, 2017.
[18] *Justice K. S. Puttaswamy* (n 11).
[19] *Shreya Singhal v. Union of India* (2015) 5 SCC 1.

INDRAPRASTHA LAW REVIEW

against algorithmic manipulation that compromises mental autonomy, and safeguards against online harassment that compromises emotional well-being.

IV. TECHNOLOGICAL STRESS, ONLINE HARASSMENT, AND THE CONSTITUTIONAL THRESHOLD OF MENTAL HARM

The Constitutional Threshold for Recognising Tech-Induced Mental Injury

Although mental health has long been recognized as a crucial element of the right to life in Indian constitutional jurisprudence, the law is still not sensitive enough to the mental harm that can be caused by technology. Conventionally, there had to be direct observable infringement or evidence of physical harm in order to constitute a constitutional violation.[20] However, mental harm caused by digital technology is often insidious and ingrained in technology.

Continuous connectivity that erodes personal boundaries; surveillance-driven anxiety brought on by data collection and algorithmic profiling; compulsive digital use created by persuasive design; and information overload that results in emotional and cognitive exhaustion are some of the ways that technological stress shows up.[21] Because these harms are systemic and persistent rather than episodic, they pose a challenge to the traditional injury model. The dignity-oriented interpretation of Article 21 is implicated when technological architectures create persistent psychological pressure that compromises mental stability and autonomy.

The Invisible Nature of Digital Mental Harm

The invisibility of tech-induced mental harm is a major challenge in identifying it. Techno-stress and algorithmic manipulation, in contrast to physical harm, are embedded in design ecosystems created by platforms and are rarely the result of a single actor.[22] Victims might not even be aware that intentional design decisions like infinite scroll, FOMO triggers, or algorithmically enhanced emotional content are the cause of their anxiety, self-doubt, or short attention spans. This invisibility makes it more difficult to prove state failure from a constitutional standpoint. However, even when harm appears indirectly, the State should regulate environments that compromise mental integrity, according to the growing theory of positive obligations found in environmental and public health rights.[23]

[20] *Maneka Gandhi* (n 13).
[21] Madhav Tarafdar (n 1).
[22] Shoshana Zuboff (n 10).
[23] *Subhash Kumar* (n 14).

INDRAPRASTHA LAW REVIEW

Online Harassment as a Constitutional and Psychological Injury

A more overt but no less terrible form of digital mental harm is online harassment. Cyberstalking, morphing, doxxing, abusive trolling, targeted threats, non-consensual image sharing, and hate amplification are all included. These behaviors cause severe psychological distress, which can result in social disengagement, fear, depression, and insomnia.[24] Women, children, minorities, and people whose identities make them targets of online animosity suffer especially severe emotional repercussions.

Although particular instances of harassment are illegal under criminal codes, constitutional interpretation is concerned with whether such harm impinges an individual's ability to participate in society and exercise fundamental freedoms. Cyber environments are now considered an extension of public spaces, and exclusion from these due to psychological harm impinges personal liberty, equality of participation, and freedom of expression.[25]

The Supreme Court's acknowledgment of the chilling effect in *Shreya Singhal* shows that, even in the absence of bodily harm, fear and psychological intimidation in online environments can be a constitutional violation.[26] The same reasoning holds true for online harassment that pushes victims offline, stifles their ability to express themselves, or causes ongoing distress.

Regulatory Limits, Dark Patterns, and the Problem of Consent

Dark patterns and interface designs that manipulate user behavior through deceit or emotional pressure are becoming more and more common in digital environments. These include disguised ads, panic-inducing alerts, forced opt-ins, and engagement-maximizing alerts meant to cause anxiety.[27]

In such cases, the concept of consent becomes irrelevant. Manipulated consent is neither free nor informed. According to Article 21, autonomy is the freedom to make decisions that are not coerced by technological forces, rather than the ability to make decisions.[28] The role of constitutional review becomes important as social media platforms create a space where they deliberately exploit psychological vulnerabilities.

Online Harassment and the State's Positive Duty to Ensure Safe Digital Spaces

In addition to punishing the guilty, the constitutional duty of the State also involves ensuring that the structural components of online platforms are not continuing to do harm. Online

[24] Pooja Chugh (n 8).
[25] Manish Srivastava (n 9).
[26] *Shreya Singhal* (n 19).
[27] Aditi Mathur, '*Dark Patterns and Digital Manipulation'* (2021) *Technology Law Review*.
[28] *Justice K.S. Puttaswamy* (n 11).

INDRAPRASTHA LAW REVIEW

platforms are obliged by international jurisdictions such as the EU to remove harmful content, conduct risk assessments, and ensure the welfare of users.[29] This comparative experience underscores the need for India to move from a criminal model to a constitutive model of online governance.

Timely redressal mechanisms, platform accountability for harm amplification, gender-sensitive digital safety policies, constitutionally aligned content moderation standards, and mental health-sensitive design standards are all required for safe digital spaces.[30] This is in line with the dignity-centric jurisprudence of Article 21, which holds the State responsible for creating conditions that enable citizens to enjoy their right to liberty without any psychological fear or coercion.

Towards a Unified Constitutional Response to Digital Mental Harms

Cyber harassment and technological stress are not distinct problems. They are interrelated symptoms of a broader structural problem: the capacity of technological systems to shape psychological states and cause long-term mental suffering. Taken together, they require that Article 21 be interpreted to include the following rights: the right to psychological security in online spaces, the right to digital mental integrity, and the right to protection from stress caused by technology.

The recognition of these rights would merely extend the current Article 21 commitment to autonomy, privacy, and dignity into the online spaces that are currently shaping modern life.

V. COMPARATIVE PERSPECTIVES AND THE CONSTITUTIONAL RECALIBRATION OF ARTICLE 21 FOR DIGITAL MENTAL WELL-BEING

Lessons from Global Regulatory Approaches to Digital Harms

EU: Platform Accountability and the Mental Health Imperative

With the General Data Protection Regulation (GDPR) and the Digital Services Act (DSA), the European Union offers one of the strongest frameworks to digital harms. Digital platforms are required by both frameworks to reduce risks like harmful content, algorithmic amplification, dark patterns, and psychological harm.[31] Systemic effects on mental health, such as harmful recommender systems, targeted harassment, and addictive design, are specifically

[29] European Commission, *Digital Services Act* (2022).
[30] Ankit Mehra, '*Towards Safe Digital Spaces: A Constitutional Analysis'* (2021) *Indian Journal of Law and Technology*.
[31] European Commission, *Digital Services Act* (2022).

INDRAPRASTHA LAW REVIEW

acknowledged by the DSA's requirement for risk assessments.[32] The systemic impact of mental health issues, including toxic recommender systems, harassment, and addiction, is explicitly addressed through the risk assessment obligation in the DSA.[33] The regulatory approach is rooted in the understanding that platforms owe a "duty of care" and that digital spaces are structural determinants of mental health. The experience of the EU demonstrates that mental harm in digital spaces is a matter of public regulation rather than private concern.

United States: Free Speech and Psychological Harm Tensions

The First Amendment freedoms of free speech, which limit the government's intervention in online harassment and harmful speech, have always been cherished in the United States.[34] The American constitutional tradition remains quite reluctant to impose any binding duties on the platforms, even in the face of increasing litigation regarding algorithmic harm and the mental health of children, especially concerning social media addiction.[35] This approach offers a comparative perspective through which India is required to navigate the tension between Article 19 freedoms and Article 21 rights in the digital era.

East Asian Jurisdictions: Cyberbullying and State Obligations

In the wake of several reported cases of suicide that were linked to cyberbullying, countries such as South Korea and Japan have enacted particular legislation to deal with the issue of cyberbullying, cyber defamation, and cyber harassment.[36] The policies that promote digital literacy, awareness about mental health, and rapid removal notices indicate how these countries view the issue of digital mental illness as a social issue rather than a purely criminal one.

Towards a Right to Digital Mental Well-Being under Article 21

India's constitutional jurisprudence is exceptionally broad, enabling the judiciary to modify fundamental rights in response to changing social circumstances. Article 21 can logically develop to recognize a right to digital mental integrity, which includes freedom from psychological harm caused by technology, building on the doctrinal underpinnings of dignity, privacy, autonomy, and mental health.

INDRAPRASTHA LAW REVIEW

[32] Natali Helberger, '*Systemic Risks and Digital Well-Being under the Digital Services Act'* (2023) *Journal of Digital Regulation*.
[33] Natali Helberger (n 32).
[34] Danielle Citron, '*Free Speech and Cyber Harassment'* (2014) 91 *Yale Law Journal*.
[35] David Keller, '*Regulating Platforms and Youth Mental Health*' (2023) *Stanford Law Review Online*.
[36] Jisoo Park, '*Cyberbullying Legislation in East Asia'* (2021) *Asian Journal of Comparative Law*.

Conceptualising the Right to Digital Mental Integrity

Digital mental integrity would encompass the following, based on comparative practices and current Indian jurisprudence: autonomy from algorithmic nudging, profiling, and invasive data practices; protection from harassment and hate speech that causes psychological harm; freedom from digitally engineered anxiety, manipulation, and intimidation; and the right to access digital environments that do not purposefully exploit cognitive vulnerabilities.[37] Just interpreting Article 21 in accordance with modern lived realities as was the case with the judicial articulation of environmental and privacy rights instead of extending the Constitution is sufficient to grant this right.

Positive Obligations of the State in Digital Governance

The State would be subject to positive obligations under a recalibrated Article 21, such as: controlling platform design to stop technologies that are addictive or exploitative; requiring algorithmic processes that impact psychological well-being to be transparent; imposing responsibility on websites that facilitate or intensify cyberbullying; implementing digital policies that are sensitive to mental health, particularly for vulnerable users like women and children; and guaranteeing easily accessible remedies, such as quick takedown, victim assistance programs, and constitutional-level redress.[38] This approach mirrors environmental law doctrines, where the State must actively safeguard conditions that form the basis of a dignified life.

Reconciling Freedoms under Article 19 with Mental Well-Being under Article 21

Concerns about censorship or overreach are frequently raised by digital regulation. However, free speech need not be compromised in order to safeguard mental health. Alternatively, constitutional adjudication may use a proportionality framework that strikes a balance between the victim's dignity and mental integrity, the platform's economic freedoms, and the speaker's right to free speech.[39] *Shreya Singhal* has already admitted that reasonable restrictions can be justified by harms, particularly those that result in psychological intimidation and fear. Therefore, both liberty and mental health can be protected by a nuanced constitutional model.

Towards an Indian Framework for Digital Mental Well-Being

A model that is exclusive to India should incorporate both technological realities and constitutional principles. A Digital Mental Health Charter defining user rights, an extension of

[37] Giuseppe Riva (n 5).
[38] Ankit Mehra, '*Platform Accountability in India'* (2021) *Indian Journal of Law and Technology*.
[39] *Shreya Singhal* (n 19).

INDRAPRASTHA LAW REVIEW

the Mental Healthcare Act, 2017 to cover digital harm, the establishment of a Digital Mental Health Ombudsman, platform duties of care, including algorithmic audits and psychological harm risk assessments, the incorporation of digital literacy and emotional safety into educational frameworks, and state-led public awareness campaigns on digital well-being are all examples of this.[40] These changes integrate mental health as a constitutional value in India's digital governance, going beyond simply establishing regulatory compliance.

VI. INTERNATIONAL PERSPECTIVES AND THE NEED FOR RECALIBRATING STATE RESPONSIBILITY

International Norms on Digital Rights and Mental Well-Being

The constitutional and human rights frameworks in the international community are slowly acknowledging that the digital world can result in measurable psychological damage, which requires a paradigm shift in the role of the state. The right to dignity, privacy, and psychological integrity is already enshrined in international instruments such as the Universal Declaration of Human Rights (UDHR) and the International Covenant on Civil and Political Rights (ICCPR). It is only logical that this right extends to the online world in the current digital age.[41] The online world, particularly when determined by algorithms that are not transparent, can have a significant effect on psychological freedom.[42]

In a similar way, the European Court of Human Rights (ECtHR) has ruled on the European Convention of Human Rights (ECHR) that state obligations exist to protect citizens from serious psychological distress caused by cyberbullying or surveillance.[43] The recognition by the ECtHR that "private life" includes psychological integrity expands the definition of harm to include stress caused by technology.

The Online Safety Act 2021 is an explicit legislative attempt in Australia to identify and reduce the psychosocial risks associated with digital harms, particularly content-based trauma and cyberbullying.[44] Singapore, on the other hand, uses a securitized approach under the Protection from Harassment Act, emphasizing quick fixes and institutional support networks for victims of cyberbullying.[45] When combined, these frameworks demonstrate that the negative effects of digital mental health are not just sociological issues but rather legal injuries that call for prompt state action.

---

[40] Ministry of Electronics and IT, *Digital India Act (Draft Framework)*, 2023.
[41] *Universal Declaration of Human Rights*, 1948, Art. 1, 3 & 12.
[42] UN Special Rapporteur on the Right to Privacy, *Report on Privacy and Digital Platforms*, A/HRC/46/37 (2021).
[43] *X and Y v. The Netherlands* (1985) 8 EHRR 235 (ECtHR).
[44] Online Safety Act 2021 (Australia), ss. 7–9.
[45] Protection from Harassment Act 2014 (Singapore).

INDRAPRASTHA LAW REVIEW

Comparative Approaches to State Duty and Platform Accountability

The question of who is responsible for preventing and mitigating online harms has replaced the question of whether they have an impact on mental health on a global scale. Three general models are offered by comparative jurisdictions:

The Rights-Centric Model (EU)

The Digital Services Act (DSA), which places strict obligations on platforms regarding harmful content, algorithmic transparency, and mitigation of psychologically harmful digital environments, is one way that the European Union protects fundamental rights.[46] This model is consistent with the European understanding of mental integrity and dignity as enforceable human rights.

The Safety-Centric Model (Australia and UK)

Both the UK's Online Safety Act (2023) and Australia's eSafety framework view online mental harms as public safety concerns rather than human rights violations. Based on a legal duty of care, platforms are required to conduct risk assessments and offer user protections.[47] Instead of focusing on constitutional adjudication, these systems prioritize prevention and regulatory oversight.

The Hybrid Model (Canada and South Africa)

Canada understands that online harms could be violative of privacy, equality, and dignity norms and has incorporated psychological harm into general tort and constitutional law. Similarly, South Africa's constitutional court has identified mental integrity as a component of human dignity and has imposed an obligation on both public and private actors to cease and desist from harmful online conduct.[48]

Implications for India: Towards a Constitutionally Grounded Digital Mental Health Framework

Constitutional Reinforcement of Psychological Safety

The argument that the psychological safety in digital spaces must be specifically recognized as part of the right to life and liberty is supported by the developments in the global scenario. The Supreme Court of India has interpreted Article 21 to include mental health, privacy, and dignity; it is only a natural progression to include digital mental integrity.

[46] Regulation (EU) 2022/2065 on a Single Market for Digital Services, (Digital Services Act), Arts. 26–34.
[47] Online Safety Act 2023 (UK), Part 3.
[48] *Dawood v. Minister of Home Affairs* 2000 (3) SA 936 (CC) (South Africa).

INDRAPRASTHA LAW REVIEW

Statutory Duties on Intermediaries

Although the IT Rules 2021 attempt to regulate the behavior of platforms, they are not rooted in mental health concerns. Legal requirements must specifically target algorithmic harms, online harassment, and design factors that contribute to technological stress, as conceptualized in the EU and Australian models.

Strengthening State Obligations

Going by global trends, the following must be ensured by the state, apart from the formulation of regulatory policies: efficient grievance redressal mechanisms, victim-friendly support services, digital literacy initiatives that focus on psychological safety, and accountability mechanisms for political/state-sponsored cyberbullying.

Harmonising with Global Best Practices

India by adhering to Singapore's rapid-response mechanisms, Australia's risk-based obligations, and the DSA's transparency mandates can develop a healthy digital mental health framework.

VII. CONCLUSION

Mental health has become an important constitutional issue in the digital age. It has been observed that technological stress and cyberbullying are on an increase now a days. In this context, Article 21 of the Indian Constitution should come out to save and recognize the notion of digital mental integrity as a basic component of constitutional safeguarding rather than remaining confined to the limitations of the traditional understanding of "life" and "personal liberty." The definition of Article 21 has widened over the years and now encompasses right to privacy, mental health, dignity, and autonomy in the context of life and personal liberty. It has also been pointed out that digitally facilitated harms such as algorithmic manipulation, cyberbullying, doxxing, targeted misinformation, and digital surveillance pose a danger to the tenets of Article 21 of the Indian Constitution. The Global Comparative study of various countries reveals the increasing trend towards recognizing mental health and placing an obligation on the State to protect the same. This obligation transcends the boundary of state intrusion and encompasses ensuring that private digital actors do not create an ecosystem that undermines psychological security. Therefore, in order to shield people from the negative effects of technological framework, the state must create layered constitutional, statutory, regulatory, and institutional safeguard mechanisms for the citizens. Mental Health must be viewed as a constitutional requirement as Digital India is on rise and dependence of e-platforms is also rapidly increasing. Article 21 due its dynamic and evolving nature is best suited to

INDRAPRASTHA LAW REVIEW

counter this issue. Recognizing digital mental integrity as a fundamental right is not just a way forward but is also an essential step towards maintaining human freedom, autonomy, and dignity in a society which in transforming into a digital era.

INDRAPRASTHA LAW REVIEW

E-WASTE, INNOVATION AND OWNERSHIP: THE REASON INTELLECTUAL PROPERTY LAWS SHOULD CHANGE TO ADAPT TO THE RIGHT TO REPAIR

- Nikita Bhati*
- Vijay Pratap Singh Bhadoriya**

ABSTRACT

What does it really mean to own a product if you cannot repair it? In the age of intelligent devices and high-tech gadgets, consumers are starting to pay more attention to the fact that it is more difficult than ever to repair a broken phone, laptop, or appliance. Manufacturers usually have restricted access to spare parts, repair manuals, and software tools using intellectual property rights like patents and trademarks. Although these rights are intended to promote innovation and brand protection, they are also becoming a major issue of concern regarding consumer freedom and the increasing cost of repair, as well as increasing electronic waste. This article discusses how intellectual property protection and the right to repair are on the rise in conflict. It analyses the response that legal systems are taking towards this challenge, especially in India and the European Union. The article throws light on the current legal frameworks through case laws and policy development that tend to support corporate control rather than consumer access. It states that innovation and sustainability do not necessarily have to be contrary. Rather, the intellectual property laws need to be adapted to allow consumers the liberty to do whatever they want to do with their property and yet retain the true innovation. The very concept of repair is not only connected with the maintenance of the products but also with the enhancement of sustainability, lessening of waste, and consumer rights safeguarding in an ever-evolving technological environment.

***Keywords**: Patent Law, Intellectual Property Rights, Right to Repair, Sustainability, Consumer Rights, Trademark Law.*

I. INTRODUCTION

Have you ever dropped the smartphone and broken the screen, only to realise you cannot replace it without going to the original manufacturer and paying a relatively high cost? Or maybe your fridge has some manufacturing defect, and your local service centre will not offer service since the parts are not available, or even worse, they are behind the legal walls. Nowadays, in the era of the fast evolution of technology, we live among intelligent gadgets, such as phones, laptops, household appliances and cars, which make our life easier. However, it is ironic that the smarter our gadgets are becoming, the more difficult it is to fix them. Manufacturers exercise more and more control of accessibility to spare parts, repair manuals, and diagnostic tools through intellectual property rights (IPR), especially patents and trademarks. This practice not only restricts the choice of consumers but also increases the cost of repairing the product to augment a culture of disposability. Due to the unavailability of tools to repair their products, which can be easily repaired, the affected products end up in landfills. Not only is this a personal inconvenience, but also a global sustainability crisis. In 2019 alone,

* LL.M. Student, National Law University, Delhi.
** LL.M. Student, National Law University, Delhi.

INDRAPRASTHA LAW REVIEW

the world produced more than 53 million metric tons of electronic waste, and this figure is bound to increase drastically over the next few years. This e-waste is mostly burned or wasted and this leads to environmental degradation and environmental deprivation. The right to repair has become a strong counter-narrative, a concept that is based on the principles of the idea that human beings are supposed to be given the right to repair and give their products a second life instead of having to purchase a new one every several years. Simultaneously, it is also important to note that IPRs have a legitimate place when it comes to innovation. Patents also encourage inventors to come up with new technologies, giving them a temporary monopoly, whereas trademarks ensure the identity of the brand and consumer confidence. The difficulty is to strike the proper balance; how can we secure the rights of the innovators and at the same time, not unfairly shut down the consumers and independent repairers to the market? This article seeks to demonstrate that the right to repair is not simply a legal or technical issue, but a struggle to empower consumers, protect the environment and innovate in an ethical way.

The main research questions that are discussed in this article are:

(i) How much does the current intellectual property regimes- specifically patent and trademark law- inhibit or permit the right to repair?

(ii) Are the prevailing principles like exhaustion and infringement being understood in a way that unduly enriches post sale control by manufacturers?

(iii) What is the way of reforming legal systems, especially in India, to create a mix between incentives to innovation and sustainability and consumer autonomy?

The article holds that the intellectual property law is necessary to provide the incentives to foster innovation but is now being used to promote aftermarket monopolies that may harm repair rights, which also requires doctrinal clarification and legislative reformation.

This paper goes on to develop a normative approach that redefines the right to repair as a restriction internal to the intellectual property law, instead of an exception created by consumer protection bureaucracies. It maintains that the principles of patent exhaustion, implied licence, and fair use must be re-conceptualised within the context of the sustainability requirements and emerging concepts of ownership. The article suggests that the approach to repair should be viewed as a legally enforced case of ownership, and not a condoned infringement, which adds to the existing discussion of the shift towards an access-centred and sustainability-oriented framework of intellectual property. In order to see the wider implications of limiting repair, we need to place the right to repair within the context of sustainability and the circular economy.

INDRAPRASTHA LAW REVIEW

II. THE CIRCULAR ECONOMY AND THE RIGHT TO REPAIR.

The right to repair is the right of consumers and third-party service providers to obtain the tools, spare parts, software and documentation required to repair the products. It is not simply a consumer rights problem, but is progressively identified as a means of upholding sustainability. The United Nations estimates that in 2019, the amount of electronic waste in the world amounted to 53.6 million metric tons, and only 17.4% of this amount was collected and reused. Circular economy is aimed at minimising waste and maximising resources by ensuring that products and materials are used. Refurbishing and repairing are the key components in this model. However, as companies employ IPRs in preventing repairability, they are violating these principles. This poses a dilemma between innovation protection and planet protection. The e-waste and intellectual property law relationship is not an incidental one but a structural one. The practices that lead to the shortening of the lifecycle of products include restrictive IP practices, including restricting access to spare parts, implementing design patents over the essential parts, and restricting access to diagnostic software. Consumers are also compelled to use premature replacement when the cost of repair is not economically viable or legally affected, thus increasing the production of e-waste. Accordingly, the policy on waste management is not sufficient to have environmental sustainability, but rather the upstream policy of intervention of the legal structures, which dictate the design and accessibility of products, and the repairability of their components. Intellectual property law reform to support repair is thus not just an issue of consumer rights, but an essential part of environmental regulation. Nevertheless, although there is an increasing understanding of repair as a sustainability requirement, the current intellectual property regimes tend to work against these objectives. In the next section we look at the ways in which these legal protections might serve as obstacles to fixing.

III. IPRS AND THEIR RESTRICTIVE EFFECT IN REPAIRS.

This discussion directly answers the question of how intellectual property doctrines would cast their restrictions on repair practice in practice. Consumers have encountered that exasperating experience of having a device we are accustomed to and then it just dies. Perhaps it is a cracking smart phone screen or a broken washing machine or a lost battery in a laptop. Your first thought is of course to have it repaired. However, what occurs when you learn that it is barely feasible to fix your personal item on your own, or even bring it to a reliable local service person, without the consent of the actual manufacturer. And this is where intellectual property rights (IPRs) are involved. Structured to promote innovation and protect brand image, IPRs, in particular, patents

INDRAPRASTHA LAW REVIEW

and trademarks, have become a significant contributor to the formation of the modern trade. However, when they start to deny you the chance to repair the very thing which you have paid money to, they provoke some hard questions like Who is the owner of the product after it has been sold? Is it protecting innovation or are corporations simply fisting their grip on the consumer, you can take your entire original section as is and reproduce it here at full length as you have it, explanations of patents, software locks, part matching, trademarks and ethical issues.

Regarding the interpretative doctrines, the conflict is based on the broad meaning of the exclusive rights established by patent and trademarks law. The law of patents in providing a temporary monopoly is never meant to be used in extending its control over the usage and maintenance of a product even after the sale. Manufacturers however, with restrictive licensing, design patents, and embedded software protection, successfully extend their control further than the statutory one. Correspondingly, the trademark law, especially the exception of quality control, has become a method of an indirect means by which brand owners can control secondary markets. This brings up a basic inconsistency in doctrine: although the principle of exhaustion restricts the exercise of post-sale control, the court frequently reinstates the exercise of control under the guise of other principles. One of the key doctrinal arguments used by the right to repair debate is the difference between repair on the one hand and reconstruction on the other between the patent law and repair. Although repair is usually considered the legally allowable maintenance or repair of a patented product to its original functioning state, reconstruction is to re-make the patented invention and that is therefore infringement. The distinction between the two has always remained a major challenge to courts, especially in the U.S. jurisprudence. In *Aro Manufacturing Co.* v. *Convertible Top Replacement Co*., the U.S. Supreme Court ruled that when the part, which was lost in a worn-out item in a patented combination, was being replaced, it did not qualify as reconstruction but as a repair. Yet later cases show that this distinction is very factual and in most cases unpredictable. The ambiguity is amplified in contemporary technology ecosystems, which are modular, software-based, and integrated products. It is arguable that, by replacing just a single component, say a microchip or a software-locked part, one can have the whole product functionality restored, which would then beg the question of whether such efforts could substantially be considered reconstruction. Such uncertainty in the doctrinal front provides a chilling effect on the independent repair markets. Without the explicit statutory directions, the manufacturers can describe the legitimate repair functions as reconstruction, which prolongs the patent possession to an area it is not supposed to have. Politically, the strict definition of repair brings down the consumer autonomy

INDRAPRASTHA LAW REVIEW

and the sustainability objectives. The argument of the legislative clarification to point out that repair is a legitimate exercise of ownership is strong especially when the intent is to restore functionality and not copy the invention. These tensions are not just hypothetical but have been fought in courts in various jurisdictions and the courts have been called upon to interpret the boundaries of intellectual property law in the repair context.

IV. JUDICIAL BATTLEGROUNDS: WHEN INTELLECTUAL PROPERTY MEETS THE RIGHT TO REPAIR

Patent Exhaustion Reconsidered: The Supreme Court of the United States Draws a Line in *Impression Products* v. *Lexmark International*[1].

Is it possible to have a company controlling a product once it has been sold? This was the main issue that the U.S. Supreme Court had with Impression Products v. Lexmark is one such case, which now forms a constitutional pillar in the international right-to-repair movement. Lexmark, a manufacturer of printers, made cartridges available at discounted prices with a restriction of single-use/no-resale. The model of business was easy; sell cheap, reuse, and repeat purchase. Impression Products upset this ecosystem by purchasing used cartridges, refilling them and selling them at a cheaper price, a classic example of a circular economy. Lexmark retaliated by suing on patent infringement. The core of the controversy was the doctrine of patent exhaustion, the ancient doctrine that once a patented product is sold with permission the right of the owner of the patent over that particular object ceases. Lexmark believed that contractual barriers were safeguarding its patents. Impression opposed the idea that ownership had to be attached to something in that once a consumer has purchased a product, he/she ought to be at liberty to fix, reuse or resell the product. The Supreme Court, in a unanimous court decision by Chief Justice John Roberts, decided in favour of Impression Products. The Court reiterated that patent law only offers a single reward to an invention. After acquiring such reward by sale, the patentee may not employ the patent law to place post-sale limitations on it whether the sale had taken place domestically or abroad. The case made two breaking things:

1. It abhorred the imposition of the post sales ban using patent law.
2. It believed that the U.S. patent rights are also exploited by foreign sales.

This was not a technical patent decision; this was restatement of consumer ownership. The ruling made it impossible to use the patent law as a tool to create endless aftermarket monopolies. To the proponents of right-to-repair, the case was an indication that IP protection

[1] *Impression Products, Inc*. v. *Lexmark International, Inc* 581 US 360 (2017).

INDRAPRASTHA LAW REVIEW

should cease at the moment of sale. The decision however indicates the boundaries of judicial reform as well. Although post sale restrictions cannot be enforced by patent law, the manufacturers are still allowed to use the contract law or even technological locks. Therefore, Impression Products is a win-and-a-lesson that the current state of repair engineering is more and more mobile to software and licensing models.

Although the ruling is highly influential in terms of supporting the doctrine of patent exhaustion, its effect in practice is not very powerful. The Court also failed to take a look at the increasing application of technological protection mechanisms and the use of contractual licensing that still allow manufacturers to operate in order to avoid exhaustion in reality. Therefore, the decision, despite its symbolic support of consumer ownership, does not break the system of control surrounding the repair.

When Trade Secrets Recall to be Market Barriers - Motorola Solutions, Inc. vs. Hytera Communications Corp. [2]

The Motorola v. Hytera Communications. Hytera Communications shows that intellectual property can grow out of hardware to invisible software architectures. Motorola Solutions had alleged that Hytera Communications had misappropriated trade secrets and infringed patents on digital two-way radio systems used in public safety communications. The charges were severe: the former Motorola workers were accused of handing over secret software and technical documentation to Hytera, in order to allow it to enter a highly specialised market within a short period of time. The U.S. District Court of the Northern District of Illinois ruled in favour of Motorola significantly, awarding the company over 760 million dollars in damages and injunction measures in sale of its products to Hytera. In a pure legal sense, the ruling upheld trade secret and patent rights. However, on a bigger policy front, the case portrays something more: contemporary technology ecosystems are now being defended not only by patents, but by multiple layers of IP conceals - patents, copyright, firmware defences, and trade secrets. To the right-to-repair movement, this overlaying has fundamental effects. In some cases, when the hardware is seemingly fixable, it could be legally prevented from accessing diagnostic tools, firmware updates, or interoperability protocols. Enforcement of trade secrets has the potential to limit reverse engineering and the threat of litigation can scare away independent repair service into the market. The policy issue in the case is challenging: How can we safeguard actual innovation, and not permit IP regimes to construct closed technological systems? The right to repair is no longer about screwdrivers in the industries where software rules

[2] *Motorola Solutions Inc* v *Hytera Communications Corp Ltd* 108 F4th 458 (7th Cir 2024).

INDRAPRASTHA LAW REVIEW

functionality like telecommunications, automotive electronics and health technology. It is about code.

Trademark Exhaustion and parallel imports in India - Samsung electronics company limited v. Kapil Wadhwa.[3]

The repair and resale dilemma in India is not usually conducted according to a patent law- but according to a trademark law. In Samsung electronics company limited v. Kapil Wadhwa, the case with the Delhi High Court was faced by the question of parallel imports: authentic Samsung printers which were bought in foreign countries and brought to India without the permission of Samsung. The goods were authentic. The argument was not on counterfeiting. The actual question was the national exhaustion or the international exhaustion of the trademark law in India. When there was international exhaustion, the rights of Samsung would be exhausted once it was sold first anywhere in the world. In case national exhaustion was applicable, rights would be exhausted only after sale in India. The Division Bench finally ruled that India succeeds national exhaustion. Samsung still had the right to regulate imports into India and resale operations by Kapil Wadhwa was found to be infringing the trademark rights especially due to the manner in which the brand was applied in advertising and presentation. These implications to the right to repair are substantial. The refurbished or imported products are not necessarily fake, however, when they are offered with the help of the brand names in such a manner that they imply the official approval, they can be subjected to liabilities. The ruling is therefore more of brand integrity and consumer perception than unregulated second markets. This decision puts significant policy tensions in a country where access to low-cost electronics can frequently be based on parallel imports and refurbished markets:

• Should the brand control not supersede consumer affordability?
• Is it time to re-set the trademark law in Favor of sustainability objectives?
• Is it possible to legalize brand protection and reconcile it with the principles of the circular economy?

As the case will unveil, the enforcement of trademarks, which is typically considered as an external part of the repair discussion, can greatly influence the reuse economy in India. The ruling demonstrates a very safe judicial decision-making that gives more emphasis on trademark integrity rather than access to the market. This argument however is a danger of confusing consumer protection and brand control. In granting the trademark law permission to curtail parallel importation and resale of goods, the Court unintentionally curtails the

[3] *Samsung Electronics Co Ltd* v *Kapil Wadhwa* (2013) 53 PTC 112 (Del) (DB).

INDRAPRASTHA LAW REVIEW

emergence of repair and refurbishment markets- especially in sensitive economies such as India.

***Patel v. Union of India* - What occurs when enforcement of patents goes beyond the court to the port[4].**

In Patel v. Union of India, the Delhi High Court faced a more and more crucial question in the era of technology-based markets: can patent owners invoke customs officials as first line enforcers in blocking the importation of supposedly infringing electronic products even prior to the court deciding that infringement exists. The case was initiated after Mr. Patel, who advanced the rights of a patent involving digital processing technology in the smart televisions and communication systems, sought an audience with the customs authorities over the Intellectual Property Rights (Imported Goods) Enforcement Rules, 2007. Based on his grievance, customs officers started sealing the Indian ports with imported e-products of large manufacturers, claiming that they infringe patents. The mechanism of enforcement was administrative, swift and disruptive. Manufacturers appealed to the Delhi High Court on account of these measures stating that the customs forces were essentially giving customary adjudication in regard to patent matter without any judicial review of legitimacy or infringement. They argued that unlike trademarks or copyright (infringement can be easily noticed), patents can and often require technical expertise, which involves a complex question. abandoning any patent to detention of the border, as they put it, put the legitimate trade at risk. The Delhi high court took a constitutional and conservative step. Although the Court noted that intellectual property rights are, in law, legally enforceable and that the 2007 Rules give statutory authority to customs authorities, the Court pointed out that enforcement should not be done to the detriment the due process and natural justice. Claims in patents cannot be regarded as self-executory instruments of trade ban. The Court implicitly acknowledged that there was a structural issue, which is that patents may grant exclusive rights, but cannot necessarily prove infringement in all technological similarities. The customs-based seizures can be turned into strategic instruments of market exclusion instead of a valid protection of innovation without prima facie technical scrutiny or judicial supervision. The implications regarding the right-to-repair point of view are also considerable. In case patent holders have an opportunity to block the import of electronic products, spare parts, or replacement parts simply by referring to customs enforcement, the independent repair ecosystem will be harmed. Lots of repair markets, especially in India, are based on the imported parts, on refurbished assemblies or on

[4] *Patel* v *Union of India* WP (C) No 7830/2020 (Del 2020).

INDRAPRASTHA LAW REVIEW

interoperable gadgets. Uncontrolled broad border enforcement has the potential to indirectly limit access to diagnostic equipment, spare parts, and refurbished electronics required to maintain and sustain equipment. The case thereby captures a conflict within the core of modern IP governance:

• Should patent enforcement focus on speedy border elimination?

• Or must it be sanctioned through judicial review to avert anti-competitive abuse?

Notably, the Court indicated that it was conscious of the danger that patent-enforcing processes could be manipulatively used to impede competition and particularly in high-speed technology. The decision indicates judicial temporization on the likelihood that intellectual property may be used as an innovation defines, but as a market weapon. Broader policy wise, Patel v. Union of India emphasizes the necessity of moderate enforcement systems. Even though preserving inventors is crucial, the mechanisms to do so should not interfere with fair business, market access, and repair markets unless they are carefully considered. The ruling highlights that the process of intellectual property enforcement cannot exist outside the context of promoting the constitutional principles of fairness, proportionality, and economic freedom. The case is educative to right-to-repair activists. It shows that the controversy surrounding repair is not limited only to warranty or design lock; it is also touching on trade regulation, border control, and administrative enforcement practices. With more technologically complicated products at the global level and international trade, the locus of repair rights is increasingly overlapping import policies and customs procedures. Ultimately, Patel v. Union of India is an example of how enforcement architecture is just as important as substantive rights. The authority of the border blacklisting is vast. The courts have to make sure that this power is not transformed unwittingly into an instrument of excess market control especially in an area where access, affordability and sustainability are compromised. The due process that the Court focuses on is admirable; nonetheless, it does not go further enough to cover the larger issues of competition that could come about due to the application of patent enforcement as a strategic instrument. There are no explicit protections against the over-enforcement of the same and this leaves an opportunity to further abuse IP rights to hamper repair ecosystems.

The above cases exemplify the way courts have used intellectual property doctrines to influence the extent of the right to repair.

V. THE LEGAL SITUATION AND REPAIRABILITY IN INDIA.

This section compares the process of assessing innovation and consumer autonomy and sustainability in terms of the Indian legal framework. The Right to Repair Portal in India of

INDRAPRASTHA LAW REVIEW

2022 is a policy-level recognition of the problem, but without providing legislative support to it, its effect is more symbolic. India being one of the most recognized consumers of electronics in the world is at a crossroad in terms of the right to repair. In the world discussion, even though the European Union is spearheading their progressive policies, and a number of U.S. states have proposed legislation; India remains in the preliminary stages of developing a legal framework that promotes repairability and sustainability. The Department of Consumer Affairs was in the news in 2022, when it became the first department to open a portal named the Right to Repair. This was a good move- a move that the government was starting to realize that consumers were getting frustrated in the fact that they are being locked out of making repairs to the devices they possess. The portal was meant to give manuals, spares and repair advise on the major industries such as consumer electronics, farming equipment, automobiles and mobile phones. The reasoning behind the action was obvious- to lower the growing e-waste volume of India and to give Indians the opportunity to make their own devices act on their own rules. Still in spite of this progressive mind, the legislative and judicial system in consumer India is still a significant challenge.

Let's start with patent law. In India, the Patent holders have a strong monopoly. Section 107A of the Patents Act, otherwise known as the Bolar exemption, permits some activities under the umbrella of development and submitting information needed by any law over the usage, production, and sale of their inventions on a period of 20 years under the Indian Patents Act, 1970. [5]Although this is necessary in rewarding innovation, it is a problem when used in repair. The Act does not give any express exemption to repair. In contrast to other jurisdictions, like the UK, where infringement may be carved out by repair, India has no specifications on whether third-party technician can perform repair to a patented device without violating the inventor rights and copyrights. . Nonetheless, the provision is normally understood to imply experimental use as a regulatory approval, like generic drugs, but not repair. Therefore, a person would be walking a thin line should attempt to repair a patented component to use in the marketplace under this exemption, although, he would remain within the confines of the law by violating the exemption to test or reverse-engineer a product. This is legal ambiguity that puts repairers and even consumers in a bad position. When one manufacturer chooses to be vigorous in his/her patent rights, an independent technician who replaces a failed part with an original part could be charged of being an infringer. This not only restricts consumer choice, but it kills the informal repair economy which has served as the informal economy in India

[5] Patents Act 1970.

INDRAPRASTHA LAW REVIEW

since it has always been the place to go to get cheap repair. Now we shall consider the law of trademarks, in which the image is also very complicated. India adheres to the doctrine of exhaustion under Section 30(3) and 30(4) of the Trade Marks Act, 1999 [6]that provides that once the product is sold legally, the owner of the trademark loses the right to control further distribution. It is a good sign to repair activists: it means that you are allowed to resell or refurbish branded items. But there's a catch. Courts have also made exceptions where the quality or state of a fixed product might deceive consumers or even damage the image of the brand. The *Samsung Electronics Co. Ltd.* v. *Kapil Wadhwa*[7], is one of the most important cases in this area. In this case, the defendant was importing original Samsung printers and selling them in India illegally. Samsung filed a case asserting that this unlicensed resale was a trademark infringement. Partially, the Delhi High Court concurred. Although they were genuine goods, the Court believed that the way in which they were resold without the warranties set by the appropriate service or without clear disclosure could mislead the market to believe that they were warranted by the official channels of Samsung. The Court has underscored that the legitimate goods may be infringed on without necessarily having to engage in reselling goods that can deceive the people or undermine the quality of the brand. This ruling was a landmark case. It has recognized that there is the existence of consumer rights and resale freedoms, but also that they are not unconditional. Concerning the aspect of repair, this decision can indicate that non-originality or failure to disclose the refurbishments may be liable to legal attention in terms of trademark law. In the case of small repair business and resellers, it is a thin line between legality and infringement. So, what about India? The right to repair is currently not clearly enforced in the country. In semi-urban and rural regions, the consumers have a tendency to rely on independent technicians and these service providers are in a grey area of the law. No law will provide them with a guarantee that they can repair a device without any legal prosecution by manufacturers. In the same way, the consumers do not really have access to spare parts, repair software, or diagnostic tools that are becoming more and more vital in the digital devices nowadays. Since India is moving towards a circular economy and India has signed the international environmental agreements, this loophole is not simply a legal oversight, but a policy contradiction. To cut back on its e-waste, advance sustainable consumption, and empower India's vast pool of tech users, the reforms in legislation are highly required. What might this reform take the form of ? Probably, some changes to the Patents Act

[6] Trade Marks Act 1999, ss 30(3)(4).
[7] *Samsung Electronics* (n 3).

INDRAPRASTHA LAW REVIEW

so that a repair exemption similar to that which exists in the UK is introduced. Or perhaps better provisions within trademark law to distinguish true refurbishments and fraudulent operations. India might at least implement consumer rights law that will ensure all required repair tools and information are available as well as safeguard the brand integrity via disclosure standards. Until that time, the repair ecosystem of India will be alive, but susceptible to resourcefulness and the need, although it is still limited to a deficit of legal clarity. To make the right to repair really come true in India, portals and promises should be supported by real and binding legal measures that acknowledge repair as part of consumer liberty and environmental practices. These tensions are not just hypothetical but have been fought in courts in various jurisdictions and the courts have been called upon to interpret the boundaries of intellectual property law in the repair context.

VI. THE APPROACH TO RIGHT TO REPAIR IN THE EU.

EU framework offers a comparative view of the ways in which legal regimes can balance protection of intellectual property with repair rights. The European Union is considered to be an international trendsetter as far as progressive consumer rights legislation and sustainability legislations are concerned. And in the perennial discussion about what constitutes the right to repair, the EU has never been afraid of taking drastic actions to make sure that sustainability is not a buzzword, but a legal and practical impossibility. The core of the EU push towards repairability is its European Green Deal, which is a wide-ranging policy agenda meant to make Europe a climate-neutral continent by 2050. The Circular Economy Action Plan is one of the pillars of such an initiative, realizing the fact that to become sustainable, it is not enough to make the products less toxic, but to reconsider the whole lifecycle of the products, including their production and disposal. In this context, the Eco-design Directive has become one of the instruments of implementing the right to repair. With this garnering, the EU stipulates that producers of certain groupings of products including washing machines, dishwashers, refrigerators and television must guarantee that necessary spare parts are accessible to professional medicators for 10 years once a product is released to the market. Moreover, manufacturers must ensure that they make appliances in such a manner that they can be easily disassembled using tools that are readily available in the market. This could seem like a self-evident truth, but in order to restore companies that require the manufacturer to unlock their phones and computers, it is revolutionary in a world where glued together smartphones and software-locked devices have made that process impossible without the authorisation of the company. The EU revitalised approach is not about repair being an afterthought, but it is a

INDRAPRASTHA LAW REVIEW

design priority; a must-have part of sustainability. Nevertheless, the ride has not been that smooth. However, the intellectual property, particularly trademarks and patents, remains an issue despite the advancement in regulation. One instance of such tension is *L'Oréal SA* v. *eBay International AG*, determined by the Court of Justice of the European Union (CJEU). [8]In this instance, the L'Oréal firm had raised an objection to the third-party sellers reselling its branded cosmetics on eBay. The company stated that, after refurbishing these goods or repacking them, they did not comply with the quality standards of the brand. The Court ruled in Favor of L'Oréal, stating that the trademark owners have a right to intervene and stop the resale of the goods in case such resale can damage the brand image or give false information to the consumers regarding quality. The message of this decision was very clear that although resale and repair are mostly covered by the principle of trademark exhaustion, there are boundaries. In case the fixed or remodelled product also can cause harm to the brand image, or even when it is not made evident that the product is not in the control of original producer, then it may intervene and prevent its resale. This poses a big grey zone to the consumers and advocates. But what should happen to a refurbished phone that looks a little bit different than the original version? What about the case where the part that needs to be replaced is not exactly the same but is equally good in use? The position of the Court can be seen as a persistent dilemma: what to do about the rights of consumers to repair and reuse and the need to protect a brand? More to the point, what do we do to make sure that sustainability objectives are not compromised with overly strict definitions of IPR? In addition to trademarks, patent protection is also a significant challenge. The range of products that can be patented includes the design of spares, unique repair methods or diagnostic equipment. It implies that although a given consumer or a third-party repairer has the physical capability of repairing a product, he or she may be legally prohibited to do so until he/she is licensed by the owner of the patent. As an example, when an organization has a patent on a certain screen calibration technique in a TV, any effort to imitate such technique even to repair it could be called infringement. Although the Agreement on Trade-Related Aspects of Intellectual Property Rights of the World Trade Organization (TRIPS) does give some flexibility, Article 31 authorizing compulsory licensing in the public interest, such process is not frequently invoked when it comes to the consumer products[9]. It is usually applied in emergency situations in the public health (e.g., the availability of generic equivalents of life-saving drugs), rather than the authorization to repair coffeemakers

[8] *L'Oréal SA* v *eBay International AG* (Case C-324/09) [2011] ECR I-6011.
[9] Agreement on Trade-Related Aspects of Intellectual Property Rights (adopted 15 April 1994, entered into force 1 January 1995) 1869 UNTS 299 (TRIPS), art 31.

INDRAPRASTHA LAW REVIEW

or smartphones. This leads to the ability to effectively lock out whole repair ecosystems even in progressive legal structures such as the EU. That said, change is brewing. The European Commission has suggested a new Right to Repair Directive in 2023 which, once adopted, would exceed Eco-design requirements. It will increase accessibility to repair, both during and after the legal guarantee period, and it compels manufacturers to provide repair when replacement is more cost-efficient. The draft contains clauses discouraging planned obsolescence and implementing repair, when possible, instead of replacement of products which are a great move towards sustainability-first policy. More importantly the proposed directive is also known to promote standardization of spare parts and more convenient access to repair information, which IPRs have traditionally made difficult. Though the legal safeguard is not superceding the intellectual property protection, it is a step in the right direction, as the legislative interest and concern about the environment start to supersede the strict commercial protection. The subtle attitude of the EU demonstrates that the balance between innovation and access can be achieved, yet the proportion has to be altered. Manufacturers must be rewarded because of their inventions, but it should not be to the detriment of waste, obsolescence and consumer disempowerment. Well, what is the purpose of having something when you cannot fix it. Recent events suggest that the world has moved towards the acknowledgment of repair as a policy concern. In 2023, the European Commission officially introduced a Right to Repair Directive that seeks to increase product lifecycle and require repairable products. In the same way, in the United States, a number of states such as New York and California have already implemented right-to-repair laws against electronics manufacturers. These changes are indicative of a new agreement that repair should be considered as a part of consumer rights and the environmental control. Unlike the transforming, piecemeal approach of India, the European Union has a more formal regulatory framework that specifically incorporates repairability into its legal framework.

VII. STRIKING THE BALANCE BETWEEN INNOVATION AND ACCESS:

In this section, we suggest doctrinal and policy changes in reaction to the gaps found in the analysis above. This article takes a contrast to current works of scholarship that has largely viewed the right to repair as a consumer rights concern. Rather it locates repair as an element of the interior of the intellectual property law and suggests that the existing doctrinal approaches have lost their initial objective of finding a balance between innovation and access to the public.The right to repair controversy can not be perceived solely in the framework of the intellectual property law. It overlaps with the competition law, environmental law and

INDRAPRASTHA LAW REVIEW

consumer protection systems. A comparative analysis indicates that the jurisdictions with a sustainability-centered approach e.g. the European Union are more open to re-calibrating IP protections with regard to environmental issues. Countries such as India, on the contrary, still value the traditional IP enforcement leading to regulatory fragmentation. It is not an easy legal task to balance between promoting innovation and maintaining the right of the citizens to repair, but it is a social necessity. Innovation is what as consumers we count on to provide us with superior, smarter, and more efficient products. Innovation becomes worthless though when the technologies that were supposed to improve our lives are either discarded, sealed off, or are too costly to maintain. The question is: Are our recent intellectual property laws contributing to the successful innovation, or is it a silent assassination of waste and exclusion? It is time to reconsider the way we design our legal systems, particularly with reference to patents and trademarks, in order to fill this growing rift. There are many possible changes that are already implemented in different jurisdictions and might be used as an example of creating a more repair-friendly future. Let's start with patents. A possible model that has worked in one country is the UK, where the Patents Act, 1977 has Section 60(5)(a), which establishes a carve-out on repair. It confirms that repairing a product with a patented product especially to put it in its original use is not treated as an infringement[10]. This limited yet strong exception acknowledges one important difference, that is, repairing something is not equal to recreating or pirating something. Actually, the process of maintenance is an indicator of responsible ownership. This provision will help the repairers and consumers to relax a little because they are now sure that only replacing a damaged hinge or a malfunctioning display will not land them in court. India however, has not been able to follow suit. Although the Patents Act, 1970 has some form of flexibility- such as in Section 107A [11]which gives an exception in the use of patented inventions to research or education, it is not explicit on whether it allows it to be applied to repair. Such ambiguity puts independent repairers in a grey area of the law. They may be doing a service to the community by ensuring that they do not take the device to landfills but they will also be endangering to violate a patent just by doing their job. To deal with this, the lawmakers in India may make amendments to the law so that it clearly covers repair exemptions, like the one in the UK or other versions that are psychosomatic in the European Union. This would not only offer some level of legal certainty but would also allow strengthening that India is increasingly focused on sustainability, with such policies as the E-Waste Management Rules, 2022[12]. The

[10] Patents Act 1977, s 60(5)(a).
[11] Patents Act 1970, s 107A(a).
[12] E-Waste (Management) Rules 2022, GSR 360(E), Gazette of India, 2 May 2022.

INDRAPRASTHA LAW REVIEW

second important area of reform is mandatory licensing. This tool was traditionally reserved to the lifesaving drugs or national crises but could be creatively extended to the repair context. Section 84 of the Patents Act [13]in India permits the compulsory licenses where the invention patented is not offered to the people at a reasonably affordable cost. In the case of repairing tools, diagnostic software, or necessary spare parts, what would be the application of this principle ? Think about it this way: when a mobile phone company is unwilling to sell you replacement batteries or repair instructions at a reasonable price, and the outcome is that thousands of phones are thrown away, should that become the subject of the same sort of popular interest analysis that a withheld cancer drug does? Although the interests at hand vary, the point remains the same, the rights of monopolies should not be given precedence over the interest of the people. Enforcing an obligatory licensing of the repair ecosystem would not imply an open license to piracy. Instead, it would guarantee access on reasonable terms so that certified repairers or even cooperatives could keep products in circulation and not in the garbage dump. This is full harmonisation with both TRIPS Article 31 and the soul of sustainable development in the India constitutional requirements on the environment in Article 48A[14]. Finally, we may refer to the trademark law, which is not regularly mentioned when discussing repair but is no less potent. As a concept, trademarks are there to ensure that the consumer does not get confused and safeguard the brand image. In most jurisdictions such as the Trade Marks Act known as the Trade Marks Act 1999 in India, the rule of exhaustion or first sale is that once a product is sold, the trademark holder cannot prevent its resale. However, there is a twist in this matter: in case the remodelled or repaired good is viewed to be falsely labelled, e.g. use of non-original components or selling it as a new item, the proprietors of the trademarks may put their foot forward in resisting its resale as infringement. This exception brings confusion to the small repair companies and refurbishes. Can they sell a fixed laptop when they mentioned it clearly that it is refurbished ? Is it possible to invoke the brand name to come up with compatibility and not be sued? Without specific instructions, legal intimidation may cause the repair economy to shudder. In response, it would be possible to establish a presumption of legality by lawmakers and courts: when the repairer makes it clear that the product has been repaired, and it might not be the same as the original in terms of parts or condition, then it should not be assumed that the trademark is violated. The increasing popular interest in repair could also be acknowledged by courts and brand protection can be interpreted accordingly

[13] Patents Act 1970, s 84.
[14] Constitution of India 1950, art 48A.

INDRAPRASTHA LAW REVIEW

depending on the real threat of deceiving consumers. These reforms would not destroy the value of the trademarks- they would merely stop their misuse. The purpose of trademark law, after all, is not to shield corporations to unfair competition or repair culture, but to offer protection to the consumer. Combined, these three paths, such as repair-specific patent exceptions, expanded use of compulsory licenses, and updated trademark rules, will create a powerful lawyer-focused instrument to open the right-to-repair. They offer a way forward to the lawmakers, judges, and regulators to be creative with intellectual property in an era of climate crisis and digital addiction. Recognizing that repair is a social good, and that law needs to keep up with technology, will bring us closer to a place where technology and access are mutually supportive and not mutually exclusive.

VIII. THE WAY FORWARD: MAKING INTELLECTUAL PROPERTY RIGHTS COMPATIBLE WITH SUSTAINABILITY.

Notably, intellectual property reform should be regarded as an instrument of environmental rule. Legal systems can directly diminish obsolescence of products and increase the lifespan of products by requiring access to repair and restricting post-sale control. Right-to-repair reforms, in this regard, are preventative environmental policies and protect against the causes of e-waste but not its outcomes. At a time when climate change is a big issue and electronic waste is threatening to overrun our landfills, the right to repair is not a fringe consumer issue anymore, it is a sustainability issue. Fundamentally, the right to repair will enable individuals, businesses and communities to extend the life of products, redirecting them out of the environment and offloading the strain on manufacturing processes that consume resources. Repair does not only mean mending what is broken. It is democratizing technology, economic resilience and fighting the culture of disposability. When each phone receives a new battery, as opposed to being thrown into a drawer, or a washing machine, is serviced with a new part, instead of being dumped in a junk yard, we are moving nearer to a more circular economy. However, when access to spare parts, diagnostic tools or software keys is not available legally, repair is less of a right, and more of a privilege of those who can afford brand-sanctioned service centres. Intellectual property rights (IPR) especially patents and trademarks were never meant to be permanent monopolies. They are meant to encourage creativity and innovation on a temporary basis not to forever deny one the access to the necessary tools or to infringe the fundamental operation of a product. However, they are now used to call more and more to limit repair, discourage reuse, and continue planned obsolescence in the market. This contradiction has to be addressed. In case the law is made according to the common good then it cannot turn a blind

INDRAPRASTHA LAW REVIEW

eye to the increasing environmental and economic impacts of restrictive repair regimes. Legal reform is not recommended but rather needed. There is a positive development of jurisdictions starting to act. In March 2023, the European Commission suggested an extensive Right to Repair Directive, which, upon adoption, will compel the manufacturers to provide repair services even when the legal guarantee has expired. This initiative is not only an acceptance of consumer rights, but an apparent move towards climate-conscious legislation. The EU is directly entering the values of the circular economy into its law by mandating that it remain able to access repairs. India, too, is inching forward. The Ministry of Consumer Affairs created the Right to Repair portal and opened consultations with manufacturers and the civil society to develop a policy that would contribute to the making of repair information and parts available. Although this is in its infancy, is a sign of a dawning understanding that consumers should not be denied access to the products that they possess. These are simply beginning places. The current situation requires a larger legal and ethical framework that would coordinate intellectual property rights and sustainability. A rights-based approach that considers access to repair as not a violation of innovation but a core element of consumer choice, environmental responsibility, and technological justice is required. The second paradigm would be to understand that the inventor's right to make profits on his creation is valid, but not absolute. The latter should be a right that is well balanced to the societal need to decrease wastage, narrow the digital divide, and affordability in a world that is becoming more and more gadget-centric. In order to reach this equilibrium, a number of policy levers might be used: Such as:

Reducing the term of patents or reducing exclusive rights in repair-critical parts.

- Obligating the availability of repair manuals, diagnostic software and replacement parts after a reasonable time.
- Making the key repair technology license a compulsory practice in the common good.
- Establishing hubs with active partnerships with the private sector to facilitate independent repair ecosystems, particularly in underserved areas.
- Incorporating circular economy aims and objectives in IP law reform, such as a sustainability impact assessment prior to awarding some rights.

Besides, legislative change has to be supplemented by public awareness and advocacy by civil society. Repair cafes, right-to-repair movements, and grassroots recyclers are all critical to help advance the discussion. Anyway, cultural transformation usually goes before legal transformation. Finally, the law should be in the interest of people and planet- not only corporations and profits. Through careful changes, the balance of promoting innovation and the right to own, repair, and reuse can be reestablished. We can and must have intellectual

INDRAPRASTHA LAW REVIEW

property rights, alongside an environmentally conscious approach and equality. One thing is definite as we crank into the future and that is repair is resilience. And sustainability, ecological and economic, is what the 21st century requires of us. We should make our legal systems up to that requirement.

IX. LEGAL AND POLICY IMPLICATIONS.

There are some significant legal and policy implications as a result of the analysis made in this article.

First, statutory clarification of patent law is required, especially to draw a line between what is allowed as repair and what is forbidden as reconstruction. A clear repair exception would help avoid confusion and abuse of patent holders.

Second, the law on trademarks has to be rebalanced in a way that does not hamper the secondary markets. There must be clear guidelines that are established to allow the resale of repaired and refurbished products, but with sufficient disclosure to avoid confusion with consumers.

Third, access to spare parts, diagnostics, and repair information should be a regulatory intervention. This can be done either by specific legislation or by increasing consumer protection systems.

Fourth, environmental policy must be combined with intellectual property policy, because it is acknowledged that limitations to repair are a direct cause of e-waste. Mendability must be considered as an important part of sustainable product design and lifecycle oversight.

Lastly, there is the need to change legal philosophy - the perception of intellectual property as an instrument of control is to be replaced by a realization that intellectual property is a mechanism that needs to work on a par with other interests of the society such as sustainability, competition and consumer rights.

X. CONCLUSION

The tension that is increasing between intellectual property rights and the right to repair is of a more serious and more acute conflict, that is the struggle between commercial profit and the future of the planet. Although in the past, patents and trademarks have put the centre stage in innovation and safeguarding inventors and brand identity, their current usage is typically driven to a grey zone where they are not employed to promote creativity, but to manipulate the post-creation of the product. By doing so, IPRs may play an unintended (or intentional) role in becoming a means of planned obsolescence, sustaining a linear economy of make, use, discard, a model no longer viable on the rising e-waste and climate change. It is not the intellectual property system that should be abolished but rather it should be reformed, very cautiously, very

INDRAPRASTHA LAW REVIEW

thoughtfully, in such a way that it still can encourage ingenuity without compromising the sustainability. The Indian, European and other world legal systems are at a crossroad. They need to understand that even though innovation should be safeguarded, repair should be as accessible as well in constructing an economy where people are equitable, and environmental conscious. Legal solutions exist. These involve incorporating explicit repair exemptions into the patent legislation, enhancing consumer rights after sales, curbing brand creepiness by imposing trademark laws and considering the more extensive application of compulsory licensing to tools and technologies that are repair essential. However, the reforms can work only in case they are followed by a cultural change that will acknowledge the right to repair, maintain, and prolong the life of the things we own. The availability of repair is not only a technical or a legal problem but also a question of morality and fairness. Consumers lose the freedom when deprived the right to repair their own property. Lacking entry of small repair businesses to the market means losing economic opportunities at the community level. And as repair is used in lieu of forced replacement, the environment is paying the price. In order to genuinely keep the word innovation, we should make sure that it is not only serving profits but people and the planet as well. It is about moving away the attitude of control to a space of collaboration; protectionism to progressivism. Repair has a future that can be found in our capacity to rethink and redesign the intellectual property laws in such a manner that they do not become a hindrance towards sustainability but instead they are made to form part of the answer. Repair is not a luxury we can afford to keep in case we are any serious about creating a circular economy and a liveable planet. It must be a right. A right backed by law. A right protected by policy. And, above all, a right that is a kind of collective duty to our future generation.

INDRAPRASTHA LAW REVIEW

GLOBALIZATION'S IMPACT ON ADR: COMPARATIVE EVOLUTION IN DEVELOPING AND DEVELOPED NATIONS

- Deepanshu*

ABSTRACT

This study provides a comparative analysis of globalization's influence on alternative dispute resolution (ADR) in developing Asian countries (India, Malaysia, Singapore) versus Western nations (USA, UK). It finds that globalization generally accelerates ADR adoption globally, but developing countries emphasize ADR to relieve court backlogs and attract investment, whereas developed countries focus on refining institutional frameworks. Emerging trends like online dispute resolution (ODR) are noted, and the study highlights policy implications (such as the need for supportive laws and ADR technology) while suggesting directions for future research.

This study examines how globalization has influenced the development of alternative dispute resolution (ADR) mechanisms across different countries. Global economic integration has accelerated ADR adoption (e.g., arbitration, mediation) as an efficient complement to litigation, but its benefits have been uneven: developing countries often face severe court backlogs and limited resources, whereas developed countries have more established legal institutions. The paper compares selected developing Asian nations (India, Malaysia, Singapore) and Western economies (USA, UK) to assess whether globalization has driven ADR reforms differently in these contexts. It asks whether developing countries use ADR mainly to address backlogs and attract investment, in contrast to mature economies treating ADR as a refined procedural tool. Using a qualitative comparative case-study approach, the analysis reviews each country's historical legacy, legal framework, and recent reforms through 2025, with emphasis on major developments such as India's Mediation Act of 2023 and the emergence of online dispute resolution (ODR). Findings indicate that globalization has generally expanded ADR practice in all studied nations, but with divergent emphasis. Developing countries expanded ADR through new legislation and institutional changes to improve access to justice and enhance investment climates. In contrast, developed countries refined procedural frameworks (for example, mandating ADR in court processes) and strengthened arbitration institutions. Emerging technological trends like ODR are noted globally. The study concludes that globalization and ADR have a complex, dynamic relationship: globalization drives broader ADR adoption but local context determines its form. This up-to-date comparative analysis highlights policy implications (for example, the need for supportive legal frameworks and ADR technology investment) and contributes novelty by integrating digital developments. Limitations include its qualitative case-based focus on five countries and lack of quantitative data (assumption: narrative analysis).

- ***Key words: ADR, Comparative evaluation, Evolution, Third world countries***

In the modern world, the impact of globalization on the global legal framework is undeniable. While the emergence of globalization emphasized the benefits of open markets and international trade, its advantages have not been equally shared. For developing nations, the benefits of globalization have largely evaded them, resulting in the following situation: "the benefits seem to have passed by most of the developing world, leaving us

* Practicing Advocate at Delhi High Court, currently pursuing LLM student at USLLS, GGSIPU.

INDRAPRASTHA LAW REVIEW

with problems, costs, risks, and challenges"[1]. It is in such an environment that Alternative Dispute Resolution (ADR) techniques, such as arbitration, mediation, conciliation, and negotiation, have become attractive options[2]. For developing nations, the use of ADR techniques can alleviate the burden on the judicial system, providing an effective solution in the form of cost- and time-efficient dispute resolution mechanisms.[3] Furthermore, the emergence of globalization is likely to result in an increased incidence of complex cross-border disputes, with the use of instruments such as the New York Convention of 1958, the UNCITRAL Model Laws, and the Singapore Convention on Mediation providing an effective means of enforcing such dispute resolution mechanisms.

This paper explores how global forces and local histories combine to shape ADR development in selected developing Asian countries (India, Malaysia, Singapore) compared to major Western ADR systems (USA, UK). It poses the following questions: Do developing (so-called "Third World") countries use ADR differently, e.g., to address judicial backlog and attract investments, compared to mature economies that may consider ADR as an advanced tool to complement their sophisticated legal systems? It explores the historical legacies, economic integration, and policy factors that shape ADR development in these countries. It evaluates the governance systems (laws, institutions, treaties), as well as local perceptions of globalization, which may shape ADR development. It places particular emphasis on recent ADR development (until 2025), including the Indian Mediation Act enacted in 2023 and the emergence of online dispute resolution (ODR).

I. HISTORICAL EVOLUTION OF ADR IN THE WEST

Western legal systems generally modernized ADR through statutory reform and court rules. In the USA, the historical background of ADR goes back to the common law of arbitration, such as the 1787 legislation in Rhode Island, and the "conciliation" boards of the 19th century in the USA's metropolitan areas. However, the major milestone in the development of ADR in the USA was the Federal Arbitration Act of 1925, which approved the enforcement of arbitration agreements and the enforcement of arbitration awards throughout the USA. From the second half of the 20th century, the development of ADR in the USA is marked by the gradual growth of court-connected ADR. This is supported by

[1]Martin Khor 'Parties, Problems, Costs, Risks and Challenges' (*IFCC* 11, G77) <https://www.g77.org/ifcc11/docs/doc-12-ifcc11.pdf >accessed 25 November 2025.

[2] 'Global best practices on mediation collected in a single publication' (*UNDP Uzbekistan*, 19 May 2020) <https://www.undp.org/uzbekistan/publications/global-best-practices-mediation-collected-single-publication >accessed 25 November 2025.

[3] 'Global Best Practices on Mediation' (n 2).

INDRAPRASTHA LAW REVIEW

the Pound Conference (1976), which popularized the "multi-door courthouse" idea and urged judges to refer disputes to ADR and mediation[4]. Moreover, the 1983 revision of the Federal Rules of Civil Procedure urged judges at pre-trial conferences to consider ADR as an option, which marked the policy change in the development of ADR in the USA. By the 1990s, all federal district courts in the USA had ADR plans under the Civil Justice Reform Act of 1990. Subsequently, the Alternative Dispute Resolution Act of 1998 mandated the offer of ADR programs in the USA's federal courts, including mediation, arbitration, and conciliation[5]. Today, the American ADR system is well-developed, with the AAA and JAMS offering institutional support, the courts frequently requiring parties to consider ADR from the outset, and the inclusion of ADR clauses becoming standard practice in commercial agreements. While state laws differ, with many states having their own legislation on arbitration or mediation, there is no single model that prevails; the FAA and the state adoption of the Uniform Arbitration Act (1955) or the Revised Act (2000) coexist, with the courts being liberal towards the use of arbitration. Mediation developed in the US more through practice and rule rather than federal legislation, although there is no national Mediation Act; many states, such as Florida and Texas, have led the way with the mandatory mediation of civil cases.

The United Kingdom's path was somewhat similar. English law prior to 1996 was a hodgepodge of common law and prior statutes. In 1979, the UNCITRAL Model Law on International Commercial Arbitration of 1985 sparked law reform movements around the world, and the United Kingdom was one of the first signatories of the 1958 New York Convention. In the end, the United Kingdom's Arbitration Act of 1996 overhauled English law on arbitration with a new and improved framework favoring arbitration and confirming party autonomy and New York Convention awards. Meanwhile, mediation and ADR became priorities of court reform. The English courts historically encouraged ADR – e.g. the Civil Procedure Rules (CPR) have for years obligated parties and judges to consider non-court dispute resolution – but they stopped short of compulsion. However, in October 2024, the CPR was amended (following the *Churchill v. Merthyr Tydfil* appellate decision) to permit courts to order parties into ADR "where proportionate and not undermining the right to a hearing"[6]. In other words, while England once had a "Halsey rule" prohibiting

[4]Dorcas Quek, 'Mandatory Mediation: An Oxymoron? Examining the Feasibility of Implementing a Court-Mandated Mediation Program' (2010) 11 Cardozo J Conflict Resol 479.

[5] Quek (n 4).

[6] Stuart Alford, Oliver Browne, Jumana Rahman and Charlotte Warke, 'CPR Changes Bring Mandatory ADR, From 1 October 2024' *Paul Hastings LLP* (7 October 2024) <https://www.paulhastings.com/en-

INDRAPRASTHA LAW REVIEW

forced mediation, that was overturned, and CPR now explicitly empowers courts to require ADR. Today, the UK has a rich ADR infrastructure: institutions like the Chartered Institute of Arbitrators (CIArb), Centre for Effective Dispute Resolution (CEDR), and the Commercial Court's London Court of International Arbitration (LCIA) are world-class. Thus, in summary, in the early 21st century, the US and the UK had completely absorbed the concept of ADR into their legal cultures, as reflected in the legislation and the rules in the courts and the institutions that had evolved.

II. HISTORICAL EVOLUTION OF ADR IN THE THIRD WORLD (ASIA)

In Asia, colonial heritage and post-independence invention are closely intertwined. In **India**, a British-style legal system was inherited at Independence in 1947. In pre-colonial days, disputes were often settled in village panchayats and communal settings. British courts, however, erected a formal judiciary and initially resisted "informal" justice methods. A 1992 study on Lok Adalats ("people's courts") notes that advocates of Lok Adalats lamented the adversarial courts as "procedurally inflexible" and at odds with local conciliation traditions[7]. The state responded by creating statutory Lok Adalats under the Legal Services Authorities Act of 1987; these local bodies aimed to settle cases through conciliation and mediation. Yet, critics observed that Lok Adalats became hybrids of central control and community norms, sometimes alienating local supporters[8].

Meanwhile, formal arbitration and conciliation gained ground. India's first comprehensive Arbitration Act (1940) was replaced by the Arbitration and Conciliation Act, 1996 – itself based on the UNCITRAL Model Law – to modernize arbitration procedure. Conciliation was also provided under Part III of the Act (an innovation from 1996). But for decades, conciliation had a low profile and few statutory incentives. Only in 2023 did India pass a dedicated **Mediation Act**, abolishing the term "conciliation" and inserting a modern framework for mediation[9]. This Act also provides for the entrenchment of mediation by

GB/insights/london-litigation/cpr-changes-bring-mandatory-adr-from-1-october-2024 >accessed 25 November 2025.

[7] 'Rule-of-Law Tools for Post-Conflict States'.

[8] 'Rule-of-Law Tools for Post-Conflict States' (n 7).

[9] Ankit Parhar and others, 'Litigation & Dispute Resolution Laws and Regulations: India' in 'Global Legal Insights, Litigation & Dispute Resolution Laws and Regulations 2025' (Gl*obal Legal Group,* 14 August 2025) <https://www.globallegalinsights.com/practice-areas/litigation-and-dispute-resolution-laws-and-regulations/india/> accessed 25 November 2025.

INDRAPRASTHA LAW REVIEW

establishing the Mediation Council of India and making mediation agreements binding like court decrees[10].

Malaysia has taken the same route of evolutionary changes. Under colonial rule by the British, common-law principles, along with UK laws, were applicable, including the enactment of an arbitration ordinance as far back as 1809 (Straits Settlements), while in 1950, an Arbitration Act was enacted for Malaya, based on the English Act 1889[11]. After independence, the status quo was maintained. The first significant reform was enacted in 2005, when the Malaysian government enacted the Arbitration Act 2005, effective 2006, replacing the 1952 Act for fresh cases. The new law was largely based on the UNCITRAL Model Law and the New Zealand Act 1996[12]. Subsequent amendments in 2011 and 2018 further perfected the law, including the latest amendments to the Model Law, rationalizing the structure of the arbitration institutions. Key development: Malaysia created the Kuala Lumpur Regional Centre for Arbitration (now Asian International Arbitration Centre, AIAC) which, along with legal reforms, positioned Kuala Lumpur as a regional seat. On mediation, Malaysia enacted the **Mediation Act 2012** to "promote and encourage mediation" as a dispute resolution method[13]. This statute makes mediated settlements binding and stipulates enforcement procedures[14]. Thus, Malaysia's ADR evolution saw postcolonial modernization through adoption of international standards (Model Laws) while also formalizing mediation locally.

Singapore (another former British colony) has arguably been the most proactive in ADR. In the early years, Singapore's legal system mirrored UK law. It acceded to the New York Convention in 1986 and passed the Arbitration Act (Cap. 10) and International Arbitration Act in 1994 (effective 1995), incorporating the UNCITRAL Model Law for international cases. However, as the 1990s progressed, Singapore launched institutional ADR initiatives. The government established court-annexed mediation (originally Court Mediation Centre, now State Courts' Primary Dispute Resolution Centre) and set up the Singapore Mediation

[10] AJ Jawad and Tariq Khan, 'The Mediation Act, 2023: Paving the Way for India as a Mediation Hub' *LiveLaw* (25 January 2024) <https://www.livelaw.in/articles/mediation-act-2023-international-mediation-mediation-council-legal-services-act-adr-247652> accessed 25 November 2025.

[11] Cecil Abraham & Partners, 'Arbitration in Malaysia: History and Infrastructure' *Lexology* (20 July 2023) <https://www.lexology.com/library/detail.aspx?g=1d0fc5f3-4782-435e-8797-630289d4046d> accessed 25 November 2025.

[12] Abraham & Partners (n 11).

[13] Mediation Act 2012 (Act 749) (Malaysia) <https://www.leepartners.my/wp-content/upload/2016/08/MEDIATION_ACT_2012_ACT_749.pdf >accessed 25 November 2025.

[14] Mediation Act 2012 (n 21).

INDRAPRASTHA LAW REVIEW

Centre (SMC) for commercial cases[15]. Family and minor disputes were handled by the grassroots schemes (Community Mediation Centres). A working group was established in 2013, co-chaired by the Chief Justice. As a result, the Singapore International Mediation Centre (SIMC) and the Singapore International Mediation Institute (SIMI) were established in 2014[16]. Finally, Singapore codified mediation with the **Mediation Act 2017**: this law recognizes mediated settlements as enforceable by court order and protects confidentiality of mediation communications[17]. In short, colonial-era Singapore had no independent mediation law, but from the 1990s onward it built a full-spectrum ADR regime. By 2019 Singapore even lent its name to the UN Convention on International Settlement Agreements (the "Singapore Convention"), and it ratified that treaty in 2020, further bolstering cross-border mediation efforts[18].

Thus, historical ADR development in these Asian jurisdictions reflects a blend of inherited Western law and revived local practices. Pre-colonial conciliation traditions were sidelined by formal courts. Post-colonial reforms deliberately *re- introduced* consensual processes to meet local needs: India's Lok Adalats, Malaysia's village panchayat mediations, Singapore's community mediation. Concurrently, all three Asian countries embraced international arbitration and model-law frameworks as they integrated into global commerce. In this way, Third World ADR evolution has run on a dual track: re-building indigenous dispute methods under modern law, while aligning statutes and institutions with global standards to attract foreign business.

III. GLOBALIZATION AND ADR REFORM

Globalization has had a strong influence on ADR worldwide, but the extent of influence varies depending on the level of development of the countries concerned. There are a number of areas which need to be mentioned:

- **Trade and Investment:** Globalization has led to an increase in the volume of international trade, which has resulted in an increase in the number of international disputes. The Western countries took the initiative in the early stages of globalization, as evidenced by the Geneva Protocol of 1927 and the New York Convention of 1958, which have globalized the recognition of arbitral awards worldwide. Subsequently, a large number of

[15]'Alternative Dispute Resolution in Civil Practice - Singapore' *Singapore LawWatch* <https://www.singaporelawwatch.sg/About-Singapore-Law/Civil-Practice-ADR> accessed 25 November 2025.
[16] 'Alternative Dispute Resolution in Civil Practice' (n 15).
[17] 'Alternative Dispute Resolution in Civil Practice' (n 15).
[18] 'Alternative Dispute Resolution in Civil Practice' (n 15).

INDRAPRASTHA LAW REVIEW

developing countries have become signatories to these conventions, such as India in 1960, Singapore in 1986, Malaysia in 1977, the UK and the US in 1975, among others. Malaysia, India, Singapore, the UK, as well as the US, have become signatories to the ICSID Convention, which allows for investor-state dispute resolution, whereas the US has become a party to the ICSID Convention as well. These countries have shown their willingness to enforce foreign

On the flip side, globalization forced Asia to focus on the importance of dispute resolution capabilities. Backlogs in the courts were an issue in the region, which impacted business activities. As the economies in the region became liberalized, especially from the 1990s, India, Malaysia, and Singapore witnessed. India enacted the Arbitration and Conciliation (Amendment) Act 2015 to speed arbitration, and in 2023 passed the Mediation Act to enforce settlements like judgments[19][20]. Singapore too has reformed, not only in the legal arena but has gone as far as developing Maxwell Chambers, which was completed in 2009 – the first integrated dispute complex in Asia, to attract global dispute cases to the region. Malaysia has developed the AIAC (2018) and amended its arbitration legislation to resemble the best global practices[21]. This, too, is a result of the influence of globalisation, as global capital enters the region, countries have to improve their ADR systems to give assurance to global investors.

- **International Law and Conventions:** Global treaties directly shape ADR in all five countries. As noted, all are New York Convention parties, allowing cross-border arbitration enforcement. India, Malaysia and Singapore have largely implemented UNCITRAL Model Laws (1996 Act for arbitration; India's 2023 Act for mediation aligns with UNCITRAL's mediation model). The global arbitration hub competition (New York/London vs. Singapore/HK) has spurred even greater harmonization: e.g. Malaysia's 2005 Act (with 2018 amendments) incorporated the latest UNCITRAL reforms[22]; UK courts uphold international arbitral awards strictly per the Model Law ethos. In mediation, new conventions loom. The **Singapore Convention** (entered force 2020) sets an enforceable framework for cross-border mediated settlements. Singapore and Malaysia signed it in 2019; Singapore ratified in 2020[23].

[19] Jawad and Khan (n 12).
[20] Prahar and others (n 17).
[21] Abraham & Partners (n 11).
[22] Abraham & Partners (n 11).
[23] 'Alternative Dispute Resolution in Civil Practice' (n 15).

INDRAPRASTHA LAW REVIEW

India signed in 2019 but has not ratifi15ed as of 2025. The UK signed in May 2023[24] and is preparing implementing legislation for ratification; the US signed in 2019 but has yet to ratify[25]. These positions reflect attitudes: Singapore embraced the new convention quickly to bolster its mediation hub status; the UK signaling support in 2023 evidences growing institutionalization of mediation. The treaty's impact is also felt domestically, as the Mediation Act of India, which was passed in 2023, recognizes the schema set by the Singapore Convention, albeit the fact that India has chosen not to ratify the treaty, which means the Act's enforceability remains domestic[2627].

- **Technology and Online Dispute Resolution (ODR):** Rapid tech progress has globalized ADR. All five countries are exploring ODR platforms. The COVID-19 pandemic accelerated e-hearings and e-mediation worldwide. Courts worldwide adopted video hearings, and mediation centres held virtual sessions. Notably, India has been innovative: legal scholarship reports proposals for blockchain-based ODR platforms to handle small claims or contract disputes[3628]. University studies and LiveLaw articles stress that ODR – from simple video conferencing to AI-assisted negotiation – can bypass infrastructure limits[2930]. Likewise, the UK launched an online court (the Civil Money Claims service) for low-value cases, and Singapore's judiciary offers remote hearing facilities. Thus, globalization's tech dimension diffuses best practices: each jurisdiction adds digital ADR tools, though resource gaps mean developing countries view ODR also as a way to leapfrog traditional problems.
- **Regional and Political Factors:** Regional trade blocs and politics are also involved in ADR. For example, India and its neighboring countries have agreed on trade

[24] Chartered Institute of Arbitrators, 'UK Government signs the Singapore Convention on Mediation' CIArb (17 May 2023)< https://www.ciarb.org/news-listing/uk-government-signs-the-singapore-convention-on-mediation/ >accessed
25 November 2025.
[25] United Nations Convention on International Settlement Agreements Resulting from Mediation (adopted 20 December 2018, entered into force 12 September 2020) UNTS 3360 No 56376 ('Singapore Convention').
[26] Jawad and Khan (n 18).
[27] Prahar and others (n 17).
[28] Yash Agarwal, 'Blockchain and Online Dispute Resolution: Reshaping Access to Justice' *LiveLaw* (Law School, 15May 2025)<https://www.livelaw.in/lawschool/articles/blockchain-odr-india-next-generation-justice-adr 292222> accessed 25 November 2025.
[29] Agarwal (n 36).
[30] Rahul Kumar Gaur, 'Tech-Driven Justice: Unraveling the Dynamics of Online Dispute Resolution' *LiveLaw* (Law School, 9 June 2024) <https://www.livelaw.in/lawschool/articles/future-of-justice-technology-alternative-dispute-resolution-260027> accessed 25 November 2025.

INDRAPRASTHA LAW REVIEW

agreements that include arbitration clauses. ASEAN countries such as Malaysia and Singapore have agreed on mutual legal assistance in ADR. The World Bank and UN support ADR in their development aid initiatives. But as Khor's analysis indicates, developing countries may oppose globalization initiatives that they perceive as biased against them. This ambivalence can affect ADR reforms: countries may adopt ADR technology and laws as pragmatic necessity, while remaining cautious of over- dependence on external models[3132]. In effect, globalization brings both incentives (market growth needing dispute mechanisms) and critiques (ADR as neoliberal export) into the ADR policy mix.

IV. COMPARATIVE ADR GOVERNANCE

This section compares the **legal and institutional frameworks** governing ADR in our sample countries. We examine statutes, courts, institutions and treaty commitments in arbitration, mediation, and related ADR forms.

- **Arbitration Laws:** All five countries support arbitration vigorously, but their laws differ in origin. The **USA** relies on the Federal Arbitration Act (1925) for federal cases and the Uniform Arbitration Act (1955/2000) in many states; notably, the US has *not* adopted the UNCITRAL Model Law for domestic arbitral law[33]. The FAA ensures broad enforceability of written arbitration agreements and awards, reflecting a pro-arbitration federal policy. By contrast, the **UK**'s Arbitration Act 1996 embodies the UNCITRAL-inspired approach: it applies the Model Law in international arbitrations and repealed much older English law. It also governs domestic arbitrations with a similar philosophy (e.g. limiting appeal rights to narrow grounds).

In **India**, the Arbitration and Conciliation Act (ACA) 1996 (amended in 2015) is based on the Model Law. It governs both domestic and international commercial arbitration. It mandates minimal judicial intervention (courts can hardly review arbitral awards) and provides for interim relief by courts. The Act has been heavily litigated in courts to clarify scope, confidentiality, and arbitrator qualifications. In **Malaysia**, two arbitration statutes coexist: the Arbitration Act 1952 (based on the English 1950 Act) which still applies to

[31] Gaur (n 30).
[32] G-77, 'Parties, Problems, Costs, Risks and Challenges' (G-77/IFCC-XI/12, 11th Session, Havana, March 2005) <https://www.g77.org/ifcc11/docs/doc-12-ifcc11.pdf >accessed 25 November 2025.
[33] Dana H Freyer, 'The United States Federal Arbitration Act' (Skadden, August 2006) <https://www.skadden.com/-/media/Files/Publications/2006/08/The-United-States-Federal-Arbitration-Act.pdf > accessed 25 November 2025.

INDRAPRASTHA LAW REVIEW

arbitrations commenced pre-2006, and the newer Arbitration Act 2005 for later cases[34]. The 2005 Act is largely Model Law- based, and was revised in 2018 to reflect UNCITRAL's 2006 amendments[35]. (Any arbitration agreements existing before 2006 default to the 1952 Act.)

Singapore distinguishes domestic vs international: the old Arbitration Act (Cap. 10) governs domestic arbitrations, while the International Arbitration Act (IAA, Cap. 143A) applies Model Law rules to international cases. Singapore acceded to the New York Convention in 1986, making awards foreign-recognizable. The IAA was updated in 1995 after initial enactment. Singapore also has progressive arbitration policies: courts routinely grant assistance (e.g. interim measures via Model Law Article 9), and Singapore's institutions (SIAC, SICC international commercial court, etc.) use modern rules.

- **Mediation and Conciliation Laws:** There is more variation here too. The USA has no federal mediation law, while federal courts promote or require ADR under Rule 16. Many states have passed Uniform Mediation Acts (UMAs) for confidentiality or NMJA (Uniform Mediation Act) rules, but there is no single national regime. The **UK** likewise lacks a single Mediation Act; mediation is mainly driven by court practice and legal profession norms. However, the UK requires parties in certain civil cases to hold a Mediation Information and Assessment Meeting (MIAM) before litigation, reflecting courts' "overriding objective" to promote ADR. As noted, CPR was amended in 2024 to actively mandate ADR where appropriate[36]. In Asia, dedicated mediation laws exist. **India's** Mediation Act 2023 (effective late 2023) overhauled Part III of the ACA: all references to "conciliation" became "mediation"[37]. This law establishes the Mediation Council of India as a statutory body, mandates court referrals, and most notably declares that a settlement agreement signed in mediation is "enforceable in the same manner as if it were a judgment or decree"[38]. In effect, mediated agreements become akin to court orders. The Act also integrates online mediation and even community and Lok Adalat-style mediation under law[39]. **Malaysia's** Mediation Act 2012 makes mediated settlements binding once signed by parties[40]. It sets out procedural norms (e.g. confidentiality,

[34] Abraham & Partners (n 11).
[35] Abraham & Partners (n 11).
[36] Alford and others (n 14).
[37] Prahar and others (n 12).
[38] Jawad and Khan (n 17).
[39] Prahar and others (n 12).
[40] Mediation Act 2012 (Malaysia, Act 749) https://www.leepartners.my/wp-

INDRAPRASTHA LAW REVIEW

role of mediator, registration of agreements). Singapore's Mediation Act 2017 similarly provides for court-endorsable mediated agreements and strong confidentiality protections[41]. Similarly, community mediation legislation has also been enacted in Malaysia and Singapore, namely the Singaporean Community Mediation Centres Act (1997, reformed in 2018) and its equivalent in Malaysia, to settle minor domestic disputes at the grassroots level. These statutory frameworks mark Asia's embrace of mediation as mainstream.

- **ADR Institutions and Infrastructure:** Each country has built or fostered arbitration and mediation bodies. The **USA** has major private ADR centers (AAA, JAMS, CPR Institute) and specialized agencies (e.g. FINRA arbitration for securities). It also has federal district ADR programs and state/local court mediation centers. Institutions in the UK include CIArb, CEDR, London Court of International Arbitration (LCIA), and an arbitral academy of National University of Singapore (although Singapore is a separate jurisdiction). Court Annexed Mediation Centers are available through institutions such as the Manchester Dispute Resolution Centre. In India, arbitral centers include Delhi International Arbitration Centre (DIAC), Mumbai Centre for International Arbitration (MCIA), and others. Permanent Lok Adalat and Mediation Centers are available in various district courts across India. Mediation Council of India was formed in 2023 and is still being operationalized. In Malaysia, the flagship center is the Asian International Arbitration Centre (AIAC), which evolved from the Kuala Lumpur Regional Centre. It offers arbitration, mediation, and expert determination rules. It also hosts a national Legal Aid Bureau that runs Lok Adalats for pre-court mediation and conciliation. Singapore's claim to fame is the complex housing SIAC, SIMC/SIMI, SIAC Arbitration Academy, Singapore International Commercial Court (SICC), and Maxwell Chambers. Singapore Mediation Centre (SMC) handles domestic disputes. Government initiatives such as those leading to the creation of SIMC/SIMI indicate a promotional role by the government because Singapore wanted to develop itself as an "international commercial mediation hub"[42].
- **Treaties and International Commitments:** All five countries have ratified the important treaties and agreements in the realm of ADR. As mentioned above, all

content/uploads/2016/08/MEDIATION_ACT_2012_ACT_749.pdf accessed 25 November 2025.

[41] 'Alternative Dispute Resolution in Civil Practice' (n 11).

[42] 'Alternative Dispute Resolution in Civil Practice' (n 11).

INDRAPRASTHA LAW REVIEW

five countries have ratified the New York Convention and ICSID and thus have pledged to abide by the enforcement of arbitral awards and investor-state mediation. As far as mediation is concerned, Singapore and Malaysia have ratified the UNCITRAL Med Convention in 2020, while India and the USA have not (India has signed but not ratified)[43][44]; the UK has signed the treaty in 2023[45]. Other important treaties include the UN Convention on Contracts for the International Sale of Goods (CISG), which indirectly encourages the use of arbitration and ADR by standardizing the law relating to sales agreements – ratified by the UK, Singapore, and the USA (signed but not ratified), and not ratified by India and Malaysia. Bilateral Investment Treaties (BITs) typically mandate investor-state arbitration (e.g. India has many BITs, often with carve-outs for essential services). Recent BITs (post-2016) have added provisions for mediation as a pre-arbitration step. One example: India's new Model BIT encourages mediation before arbitration. Such treaty norms, combined with regional agreements (like the ASEAN Comprehensive Investment Agreement with arbitration provisions), shape domestic ADR incentives.

In sum, governance of ADR is sophisticated in each country, but with nuances. The developed West has long-standing arbitration statutes (FAA, UK Act) and system- wide encouragement of ADR. The Third World (Asia) has rapidly updated its laws to mirror international standards: India and Malaysia now use Model Law arbitration acts, and both Asia and Western nations have enacted new mediation regimes. Where they differ is in emphasis: Asia's recent reforms (e.g. India's Mediation Act, Malaysia's Mediation Act) are partly aimed at alleviating local judicial pressures and ensuring enforceability of settlements, whereas in the US/UK, reforms tend to focus on policy shifts (e.g. CPR amendment) or procedural incentives, since their court systems were already comparatively efficient. Institutional resources also vary: Singapore's state-led development of a dispute hub contrasts with India's more fragmented but growing network of centers.

[43] Jawad and Khan (n 17).
[44] 'Singapore Convention'
[45] Chartered Institute of Arbitration, 'UK Government signs the Singapore Convention on Mediation' CIArb (17 May 2023) https://www.ciarb.org/news-listing/uk-government-signs-the-singapore-convention-on-mediation/ accessed 25 November 2025.

INDRAPRASTHA LAW REVIEW

V. CASE STUDIES AND RECENT DEVELOPMENTS

To illustrate these themes, we highlight specific cases and reforms in each jurisdiction up to 2025.

- **India – Mediation Act 2023:** India's key measure is the Mediation Act introduced in 2023 (applicable from September 15, 2023)[46]. It completely transforms India's mediation process. "Any settlement resulting from mediation" (even if there was no prior case in court) "may be registered and shall be given effect to in the same manner as if it were a decree or judgment of the court"[47]. This means that a commercial mediation agreement executed in India will be immediately enforceable by execution, subject to limited judicial review on the grounds of fraud or illegal content. The Act also establishes the **Mediation Council of India** – a regulatory body to accredit mediators, maintain a registry of settlements, and promote mediation domestically and internationally[48]. Features include voluntary pre-litigation mediation, mandated timelines (120 days, with one extension), conflict-of-interest safeguards, and allowances for e-mediation[49]. The Act even amends numerous existing statutes (Code of Civil Procedure, Contract Act, etc.) to integrate mediation. This holistic framework aims to dramatically boost India's mediation usage: prior to the Act, only about 0.11 million cases were settled by mediation out of 10+ million pending civil cases[50]. Anecdotally, stakeholders at launch hailed it as propelling India toward becoming a "mediation hub"[51]. Critics have pointed to some gaps (e.g. excluding family matters from "international mediation" defined in the Act[52]), but overall it represents a strategic globalization-era push to mainstream ADR.
- **Malaysia – ADR Uptake:** In Malaysia, the development of ADR has been through legislative and institutional improvements. The AIAC continues to market Kuala Lumpur as an arbitration and mediation venue for ASEAN-related disputes. The country joined the Singapore Convention (not yet in force in Malaysia as of 2025, but expected). On the legislative side, the Mediation Act 2012 (Act 749) provides

[46] Prahar and others (n 12).
[47] Jawad and Khan (n 17).
[48] Prahar and others (n 12).
[49] Prahar and others (n 12).
[50] Prahar and others (n 12).
[51] Jawad and Khan (n 17).
[52] Jawad and Khan (n 17).

INDRAPRASTHA LAW REVIEW

that any valid settlement agreement is binding on the parties[53]. Noteworthy use-cases include community Lok Adalats and e-Lok Adalats (during COVID) to clear smaller claims. Commercially, Malaysian courts now frequently stay litigation in favor of arbitration or mediation. A recent observation by the Malaysian Bar noted that the 2018 amendments to the Arbitration Act aligned domestic law with New York Convention practices, making Malaysian awards easily enforceable abroad[54]. Additionally, there is an active training program for mediators under schemes such as the AIAC Mediation Rules, as well as regional collaborations. The other policy drive is that the 12th Malaysian Plan (2021-2025) has advocated for the strengthening of the infrastructure for the resolution of disputes as part of accelerating the resolution of disputes. In brief, the Malaysian experience has seen incremental reform, both under the influence of globalization and domestic factors.

- • **Singapore – Hub Ambitions:** The Singaporean government has set out to position the country as an ADR hub in Asia. This shows the relationship between globalized forces and government policy. The Mediation Act 2017 has given legal sanctity to mediation processes, even though the SMC has been settling thousands of cases already[55]. Singapore ratified the Singapore Convention early, with the Convention entering into force on February 2020, to further solidify its position as an international hub. Singapore has also quickly adapted to the use of ODR, funding projects such as the "Smart Service Office," which offers online portals to facilitate mediation case intake and management. The Singapore International Mediation Centre was launched in 2016 with government support, offering discounted fees and global panelists to attract foreign users to the centre. The statistics of the Singapore International Arbitration Centre speak volumes – 402 new cases administered in 2018, totaling US$7+ billion in dispute value[56], a reflection of the global shift to the east. Singapore's cultural attitude is to view globalization pragmatically and to update ADR laws to complement its trade profile. The government and judiciary have repeatedly organized ADR conferences and working groups (e.g. the 2013 Mediation Working Group) to innovate. Result: Singapore now ranks high in

[53]Mediation Act 2012 (Malaysia, Act 749) https://www.leepartners.my/wp-content/uploads/2016/08/MEDIATION_ACT_2012_ACT_749.pdf accessed 25 November 2025.
[54] Abraham & Partners (n 19).
[55] 'Alternative Dispute Resolution in Civil Practice' (n 11).
[56] 'Alternative Dispute Resolution in Civil Practice' (n 11).

INDRAPRASTHA LAW REVIEW

international surveys (e.g. Queen Mary's survey named it a top-three arbitration seat in 2018).

- **USA – Procedural Mandates:** In the US, recent developments have largely been evolutionary rather than revolutionary. For example, some states and federal agencies are modernizing ADR rules. The federal judiciary continues to enforce ADR programs vigorously, and many states (like California) have broadened mandatory mediation requirements in civil cases. There have been important court decisions affecting arbitration law (e.g. US Supreme Court cases limiting state court interference with arbitration agreements), but these are technical. On the technological front, some American courts and agencies are piloting ODR platforms for small claims (e.g. pilot programs in e- commerce dispute resolution). However, unlike India, the US has not enacted new nationwide ADR statutes recently; its "ADR Act" of 1998 merely codified existing federal court practices[57]. Thus the US case underscores that in already advanced systems, globalization's ADR influence is mostly in mindset and practice norms, not in sweeping new laws.
- **UK – Court-Driven Changes:** As noted, the UK's key development in 2024 was allowing courts to compel ADR[58]. Beyond that, UK policymakers are pushing mediation in public justice. In 2022 the government consulted on making mediation a default step in litigation, and CIArb reports indicate a strong pro-mediation lobby. Moreover, the UK signed the Singapore Convention in 2023[59], signaling commitment to internationalized mediation enforcement. On arbitration, the UK Law Commission published a draft Bill in 2023 to amend the 1996 Act (curbing frivolous challenges, clarifying powers), reflecting a desire to stay competitive. Additionally, the UK encourages the use of ADR in business relationships. To cite an example, the recent report from the Civil Justice Council suggests a series of nudges for disputing parties to consider mediation. Although no new "Mediation Act" is in place, the clear trend in both law-making and policy is unmistakable: ADR (and mediation in particular) is now an integral component of legal policy in

[57] Dorcas Quek, 'Mandatory Mediation: An Oxymoron? Examining the Feasibility of Implementing a Court-Mandated Mediation Program' (2010) 11 Cardozo J Conflict Resol 479 https://larc.cardozo.yu.edu/cjcr/vol11/iss2/7 accessed 25 November 2025.
[58] Alford and others (n 14).
[59] Chartered Institute of Arbitrators, 'UK Government signs the Singapore Convention on Mediation' CIArb (17 May 2023) https://www.ciarb.org/news-listing/uk-government-signs-the-singapore-convention-on-mediation/
accessed 25 November 2025.

INDRAPRASTHA LAW REVIEW

England and Wales.

Each case has its own distinct emphasis: the Indian one was a comprehensive overhaul of the law to internationalize the results of mediation, the Malaysian one involved the incremental adoption of global norms, the Singaporean one involved strategic hub-building with legislative support, the US involved technical adjudicatory modifications, and the UK involved the adaptation of procedural rules to force the adoption of ADR. However, all these have one common feature: the impact of globalization, whether through conventions (NYC, Singapore Conv), technology (ODR), or the mere force of global trade requiring the efficiency of dispute resolution.

VI. DISCUSSION

Based on the comparative analysis, globalization was found to boost the practice of ADR universally, but the way it influences the practice of ADR differs from place to place. Developing Asian countries have been found to adopt the reforms of ADR both due to the pressures of globalization and to address the defects of their system. For instance, the 2023 Act of India was found to have essentially incorporated the global mediation enforcement mechanism into the domestic legal system[60][61]. Similarly, the move of Malaysia towards model law arbitration and the signing of international treaties on ADR suggest that the country is attempting to lure investors into the country through the establishment of universally recognizable dispute resolution mechanisms. Moreover, the necessity of Singapore to remain competitive on a global scale has resulted in the country tailoring its ADR system to be the face of globalization.

On the other hand, developed Western countries have a more mature institutional approach to handling ADR cases. For the US and UK, there was no need to change the fundamental principles of the six basic concepts of ADR; rather, globalization calls for the US and UK to further perfect the efficiency of their ADR mechanisms to satisfy the new market requirements. For instance, the US has further developed its case laws in the 2010s to assist the smooth flow of international and domestic trade through the following: the waiver of arbitration rights and the issue of class arbitration. Similarly, the UK is currently engaged in the implementation of the Singapore Convention and the revision of its Arbitration Act to keep pace with the times. Western countries' attitudes towards globalization are more optimistic, and they are often the initiators of the globalization mechanism of ADR (e.g.,

[60] Jawad and Khan (n 17).
[61] Prahar and others (n 12).

INDRAPRASTHA LAW REVIEW

the US drafting the UNCITRAL Conventions and the UK promoting the lex mercatoria principle in international arbitration). They rely on the support of ADR to maintain the global legal structure; however, they are more likely to be initiators rather than opponents of globalization.

Cultural factors also differ. In the West, ADR (especially arbitration) is often seen as a premium service for sophisticated parties; mediation has only recently moved from a fringe idea to mainstream. In the Third World, ADR is often touted as a way to democratize dispute resolution. For instance, Lok Adalats in India or community mediation centres in Malaysia aim explicitly to empower rural or marginalized citizens. Critics like Nader have warned that imposing Western-style ADR might undermine local justice traditions[62]. Indeed, some Asian commentators are wary of "neoliberal" ADR being an externally imposed model[63]. Yet many Asian governments have responded by *indigenizing* ADR: Indian law now acknowledges Lok Adalat settlements and even a form of Village Panchayat dispute resolution under legal aid programs. Singapore's community mediation, which offers services in multiple languages, caters to the diverse local communities as well as its international ADR services. Thus, we see that globalization has imposed foreign ADR norms, but the Asian response to these has been to hybridize these with their indigenous practices to maintain social legitimacy.

One fascinating discovery is that international law and institutions have become more "inclusive of Asian perspectives." While the vast majority of Asian countries have enacted the UNCITRAL Model Laws and ratified the key ADR conventions, their "priorities have provided the 'Third World perspective'—an emphasis on social justice and access." For instance, the newly enacted laws on mediation in India and Malaysia prioritize "low-cost pre-court mediation and the importance of confidentiality to encourage the use of mediation by 'ordinary parties.' Conversely, as a result, legal reforms in the West now also borrow a page from the South, as exemplified by the success of Singapore's legal system in leading the West to consider the use of multiple mediator panels and training. Another difference is the capacity factor. The West's court systems, despite their crowded dockets, have a larger number of judges per capita than their Asian counterparts. This is one reason why Asia is pushing ADR as a solution. This also explains why the West is more dependent on ODR than the Asian counterpart. This is because, in the absence of infrastructure in many Asian

[62] Anthony Greco, 'ADR and a Smile: Neocolonialism and the West's Newest Export in Africa' (2010) 10 Pepperdine Dispute Resolution Law Journal 658.
[63] Greco (n 62).

INDRAPRASTHA LAW REVIEW

villages, ODR can bring justice to the citizens of those villages at a lower cost. While there are certainly some instances of ODR in the West, such as online dispute resolution for e-commerce and small claims cases, they were not necessarily driven by a lack of infrastructure.

Another observation to make is with regards to the attitude towards globalization itself. In the political arena, countries such as India and Malaysia have had an equivocal attitude – engaging in global trade and simultaneously voicing their concerns at the WTO and the UN[64]. This ambivalence shows in ADR policy: reforms are often framed in development terms rather than free-market ideology. Indian policymakers, for instance, justify mediation laws not merely by economic gain but by promises of reducing court backlogs and improving citizen welfare[65]. By comparison, Western ADR reforms tend to be more pragmatically couched in commerce terms (e.g. "remain competitive in international litigation services"). Nevertheless, all parties now agree that effective ADR underpins open economies. The literature gap – lack of direct comparison – is thus being closed by recognizing that while globalization is universal, its interplay with ADR is filtered through domestic legal cultures and policy goals[6667].

CONCLUSION AND RECOMMENDATIONS

Globalization has undeniably accelerated the growth of ADR worldwide. Yet this study shows that **"One size does not fit all."** Developed countries and developing Asian nations have taken different paths shaped by history, need, and perspective. The Western systems developed ADR gradually and well-resourced courts, and then added international layers; their recent reforms simply modify and improve the existing systems. In the Global South, ADR has served both as a tool to manage the challenges of globalization and as a way to renew traditional justice systems. Consequently, India, Malaysia, and Singapore have developed hybrid ADR systems that are legally equivalent to global norms (e.g., Model Laws, Conventions) but operationally adapted to local contexts (e.g., Lok Adalats, mediation, mobile ODR).

---

[64] G-77, 'Parties, Problems, Costs, Risks and Challenges' (G-77/IFCC-XI/12, 11th Session, Havana, March 2005) <https://www.g77.org/ifcc11/docs/doc-12-ifcc11.pdf > accessed 25 November 2025.

[65] Prahar and others (n 17).

[66] G-77, 'Responding to the Globalization Challenge: A Perspective from the South' (G-77/IFCC-XI/12, 11th Meeting of the IFCC, Havana, 21-23 March 2005) <https://www.g77.org/ifcc11/docs/doc-12-ifcc11.pdf > accessed 25
November 2025.

[67] Anthony P Greco, 'ADR and a Smile: Neocolonialism and the West's Newest Export in Africa' (2010) 10 Pepperdine Dispute Resol. L.J. 649 <https://law.pepperdine.edu/dispute-resolution-law-journal/issues/volume-ten/greco-article.pdf > accessed 25 November 2025.

INDRAPRASTHA LAW REVIEW

Going forward, the following recommendations can be made. First, developing countries need to continue to tailor ADR reforms to their contexts, even as they adopt global norms. The Mediation Act in India, for instance, is a good model, as it addresses a home-grown issue of court delays by incorporating settlement enforcement into its laws, yet conforms to global best practices. Other nations can similarly design ADR measures – whether mandatory pre-litigation mediation, e-courts, or accredited non- court ADR providers – that fit their unique needs.

Secondly, all stakeholders should ensure that the legal framework for globalization includes the South's voice. For example, though the Singapore Convention is a welcome innovation, all should watch the development of the enforcement mechanisms in the Convention, particularly in countries with less trust in international agreements. International organizations such as UNCITRAL, UNDP, and the World Bank should seek feedback from Asian countries to improve the guidelines for the implementation of ADRs.

Thirdly, technology may act as a significant equalizer. Developing nations must invest in ODR technology, such as AI and blockchain technology, to deliver ADR services to their populations. Evidences of successes in India's e-Lok Adalats and proposals of smart contract mediation are promising. Western nations must join hands and support each other through sharing of experiences and capacity building of each other's mediators and establishing bilateral ADR centers.

Finally, there is a need to conduct more research. To conduct comparative research, more empirical data should be used to determine the effects of ADR on access to justice. Longitudinal research can also be conducted to determine the effects of globalization on attitudes towards ADR as globalization continues to progress. In the formulation of policies, it is essential to evaluate the effectiveness of ADR in achieving the goals of individual nations in the quest to satisfy the demands of globalization.

In conclusion, globalization and ADR have a complex and dynamic relationship. It has led to the development of robust ADR in all the five nations, despite the fact that the history and development stage of each country have led to differences in the development of ADR in each of the five nations.

INDRAPRASTHA LAW REVIEW

THE BORDER CARBON CONUNDRUM: CBAM AND THE TRADE—CLIMATE INTERFACE IN GLOBAL GOVERNANCE

- Gopansh Sharma*

ABSTRACT

This paper re-evaluates the European Union's Carbon Border Adjustment Mechanism (hereinafter referred to as CBAM), with a focus on the significant gaps in present legal frameworks, scholarly discourse, and global implementation strategies. While CBAM is heralded as a pioneering tool for climate-aligned trade, its application raises unresolved legal questions under World Trade Organization (WTO) law and risks imposing unjust burdens on developing countries. While much of the existing literature on the CBAM concentrates on its technical architecture and compatibility with WTO rules, comparatively limited attention has been paid to the broader structural, development, and procedural challenges that hinder its equitable implementation. This paper seeks to address this gap by examining critical but unexplored dimensions of CBAM, namely, the limited inclusion of stakeholders from Global South, the lack of effective and transparent mechanisms to channel CBAM revenues into climate finance, and the prevailing ambiguity surrounding carbon accounting standards. It also interrogates the uneasy tension between climate ambition and trade defensiveness, a tension that occasionally appears more as a performance of environmental virtue than a sincere redistributive project. By situating CBAM within the messy intersection of economic nationalism, environmental urgency, and asymmetrical development pathways, the discussion moves beyond a purely doctrinal frame. It contends that, in its current design, CBAM risks reinforcing existing global inequalities rather than mitigating them. To advance a more just and effective framework, the paper proposes equity-oriented, legally grounded policy recommendations that aim to promote inclusivity, transparency, and fairness in the global governance of carbon border adjustments. In this way, CBAM becomes not just a legal puzzle, but a mirror reflecting the asymmetries of the world economy. It is in those reflections that the true test of its legitimacy will be found.

Keywords: CBAM, WTO, Global South, Trade Discrimination, Inclusivity, Multilateralism.

I. INTRODUCTION

The evolving nexus between climate governance and global trade has, in recent years, entered a phase of pronounced recalibration. Central to this shifting terrain is the European Union's Carbon Border Adjustment Mechanism (*hereinafter referred to as* CBAM), an instrument conceived within the framework of the European Green Deal, seemingly to curb carbon leakage and harmonise the carbon intensity of imports with the EU's internal decarbonisation objectives. Yet, beneath this policy scaffolding lies a thicket of contention: judicial complexities, distributive asymmetries, and normative disquiet. CBAM, while animated by a professed commitment to global emissions reduction, has triggered extensive critique, particularly in regard to its consonance (or discord) with World Trade Organization (*hereinafter*

* Student of B.A.LL.B. 2nd year, University School of Law and Legal Studies, Guru Gobind University Indraprastha University.

INDRAPRASTHA LAW REVIEW

referred to as WTO) legal principles and the disproportionate burden it places upon economies in the Global South. What begins as a climate measures risks mutating into a mechanism of structural imbalance, cloaked in environmental ambition, but laden with geopolitical and ethical friction.

CBAM operates by imposing a carbon price on certain imported goods, thereby attempting to level the playing field between EU producers, who are subject to the Emissions Trading System (ETS). CBAM's operational logic involves levying a carbon cost on imports of emissions-intensive goods such as cement, aluminium, and fertilizers from jurisdictions with weaker or no carbon pricing regulations.[1] This aims to create a level playing field, deterring EU firms from relocating to countries with lax environmental standards. However, this policy carries far-reaching implications for global trade dynamics and raises significant questions regarding distributive and procedural justice. While legal scholars have examined the CBAM's compliance with WTO provisions, including General Agreement on Tariffs and Trade (*hereinafter referred to as* GATT) Articles I, III, and XX[2], this narrow lens fails to engage with broader normative and systemic challenges that hinder the mechanism's equitable and effective implementation.

The primary objective of this paper is to provide a comprehensive and justice-oriented analysis of CBAM. It does so by foregrounding unexplored issues: the exclusion of the Global South from CBAM's design process, disparities in carbon accounting and verification standards, and the absence of mechanisms to redistribute CBAM-generated revenues towards climate adaptation and capacity-building in developing countries. These gaps are not peripheral; they are central to the legitimacy, functionality, and ethical acceptability of any cross-border climate policy.

This paper foregrounds a central procedural concern: the exclusion of developing countries from meaningful participation during the formulation of CBAM. Despite its far-reaching global ramifications, stakeholder engagement was largely confined to European actors.[3] This lack of inclusivity contravenes foundational principles of international environmental law—particularly the participatory governance mandates outlined in Principle 10 of the Rio

[1] European Commission, *Proposal for a Regulation of the European Parliament and of the Council Establishing a Carbon Border Adjustment Mechanism* COM (2021) 564 final.
[2] *General Agreement on Tariffs and Trade* 1994, arts I, III and XX.
[3] European Commission, *Inception Impact Assessment: Carbon Border Adjustment Mechanism* (2020).

INDRAPRASTHA LAW REVIEW

Declaration[4] and Paris Agreement's transparency framework.[5] As a result, the legitimacy of CBAM is undermined, particularly among those nations most adversely affected by its implementation.

A further institutional deficiency lies in the absence of a standardised global methodology for assessing the embedded carbon content of internationally traded goods. The European Union's reliance on internal benchmarks creates structural disadvantages for exporters in the Global South, many of whom lack the technical capacity and institutional infrastructure necessary to generate verifiable emissions data.[6] In such cases, default carbon values are applied, which frequently overstate actual emissions. This not only distorts trade flows but also imposes inequitable economic costs on vulnerable economies.

Equally significant is the policy's failure to incorporate a redistributive framework for CBAM-generated revenues. The European Union has not yet committed to allocating any portion of these funds toward climate finance initiatives for developing countries.[7] This omission is especially concerning in light of persistent shortfalls in meeting the $100 billion annual climate finance commitment pledged by developed nations under the United Nations Framework Convention on Climate Change (UNFCCC).[8] Absent such redistributive mechanisms, CBAM risks functioning as a regressive policy instrument—exacerbating North-South inequalities while presenting itself as a tool of environmental stewardship.

While much of the legal commentary has revolved around whether CBAM can be justified under GATT Article XX[9], this paper argues that the more urgent question is whether CBAM, as presently designed, aligns with the broader principles of global climate equity. These include the doctrine of Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC)[10], which underpins both the UNFCCC and the Paris Agreement.[11]

---

[4] *Rio Declaration on Environment and Development* (14 June 1992) UN Doc A/CONF.151/26/Rev.1 (Vol I) principle 10, 31 ILM 874.

[5] *Paris Agreement to the United Nations Framework Convention on Climate Change* (adopted 12 December 2015, entered into force 4 November 2016) TIAS No 16-1104, art 13.

[6] United Nations Conference on Trade and Development, *A European Union Carbon Border Adjustment Mechanism: Implications for Developing Countries* (2021).

[7] European Commission, *EU Budget for the Future: Own Resources* (2021).

[8] UNFCCC, 'Climate Finance in the Negotiations' https://unfccc.int/topics/climate-finance accessed 20 June 2025.

[9] Steve Charnovitz, 'Border Tax Equalization and Climate Change' (2008) 38(3) *Environmental Law Reporter* 10535.

[10] *United Nations Framework Convention on Climate Change* (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107, art 3.

[11] United Nations Framework Convention on Climate Change (UNFCCC) (adopted 9 May 1992, entered into force 21 March 1994) art 3(1); *Paris Agreement* (adopted 12 December 2015, entered into force 4 November 2016) TIAS No 16-1104, art 2(2).

INDRAPRASTHA LAW REVIEW

This paper is structured to address these pressing concerns. Section II presents a literature review, identifying prevailing arguments and overlooked dimensions in existing CBAM discourse. Section III explores the procedural injustice embedded in the mechanism's formulation. Section IV analyses disparities in carbon accounting methodologies and verification infrastructure. Section V critiques the absence of revenue-sharing mechanisms and climate finance commitments. Section VI attempts to re-evaluate CBAM's legal framing under WTO law in light of environmental justice considerations. Section VII proposes alternative models and reforms for a more inclusive and equitable CBAM. The final section offers a concluding synthesis and forward-looking recommendations.

The European Union CBAM reached its final stage on 1st January 2026 making it the first carbon border policy worldwide imposing direct financial costs on imports of iron, steel, aluminium, cement, fertilisers, hydrogen and electricity based on their emission content. EU importers now purchase and surrender CBAM certificates priced according to the EU Emission Trading System (ETS), shifting CBAM from a theoretical debate to a tangible reality with profound financial implications for Global South exporters.

South Asia exemplifies this vulnerability, with some jurisdictions like India, Bangladesh, Pakistan and Sri Lanka facing acute exposure due to their high export volumes of CBAM covered goods to the EU. These countries lack an equivalent domestic carbon pricing, compelling exporters to absorb costs or slash prices, potentially by 15-22% per Global Green Research Initiative estimates; directly eroding competitiveness. India's Finance Minister Nirmala Sitharaman has denounced CBAM as a "one-sided, random trade barricade," also lodging formal complaints with the EU in early 2026 and risking derailment of ongoing India-EU Free Trade Agreement Negotiations. These frictions underscore real and not hypothetical trade disruptions.

Legally, CBAM faces a mounting scrutiny. In May 2025, Russia became the first WTO member to dispute it, claiming violations of key trade rules like GATT, the Subsidies Agreement, and Import Licensing Procedures. The EU refused consultations, raising the chance of a formal WTO panel case. Countries including India, Brazil, China, Indonesia, Japan, South Korea, Turkey and Taiwan have also raised concerns at WTO meetings, saying CBAM breaks EU's global trade promises. At COP30, developing nations stressed that one-sided trade climate policies unfairly hit low-emission economies. CBAM now operational and South Asian exporters actively facing compliance costs, this paper offers timely analysis and seeks to examine the whether CBAM is procedurally and proportionally fair. Thus, CBAM's legal

INDRAPRASTHA LAW REVIEW

battles expose its fragile legitimacy, demanding urgent reforms for equitable global climate-trade governance.

II. PROCEDURAL INJUSTICE AND STAKEHOLDER MARGINALISATION

A significant and unexplored critique of the CBAM lies in its procedural formulation, specifically the lack of meaningful participation by stakeholders from the Global South. The principle of procedural justice, foundational to international environmental law, mandates the inclusion of all relevant parties in the design and implementation of environmental governance mechanisms.[12] However, in the case of CBAM, the European Union's consultation process was dominated by domestic actors, including EU industries, environmental NGOs, and member states. Developing countries, especially LDCs and SIDS, were either insufficiently consulted or entirely absent from formal deliberations.

This procedural asymmetry is inconsistent with well-established principles of participatory environmental governance, such as Principle 10 of the Rio Declaration and the legally binding Aarhus Convention.[13] These instruments emphasize the right to access information, public participation in decision-making, and access to justice in environmental matters. The exclusion of Global South voices not only undermines the perceived legitimacy of CBAM but also limits its capacity to incorporate diverse perspectives and address the differentiated responsibilities and capacities of developing nations.

Moreover, the European Commission's impact assessments and stakeholder forums reveal a Eurocentric framing of CBAM objectives, focusing primarily on carbon leakage prevention and competitiveness, with marginal consideration of transboundary distributive impacts. CBAM's architecture leans towards an exclusionary tilt, a kind of procedural blinkering that mirrors, and magnifies, the entrenched imbalances in global climate rule-making. Article 4.8 of the UNFCCC[14], whispers insistently about attending to the worries of the vulnerable, yet here that whisper dissolves into static.

The machinery hums on without the voices of those most bound to its consequences, the exporters who juggle labyrinthine carbon-accounting systems with threadbare technical scaffolding. In the absence of their imprint, adaptation turns clumsy: reporting systems jar against local capacities, compliance stumbles, disputes sharpen at the edges.

---

[12] Lavanya Rajamani, 'The Increasing Currency and Relevance of Rights-Based Perspectives in the International Negotiations on Climate Change' (2010) 22(3) *Journal of Environmental Law* 391.

[13] *ibid*

[14] *United Nations Framework Convention on Climate Change* (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107, art 4(8).

INDRAPRASTHA LAW REVIEW

Such frictions, in the long run, do not only destroy the practical spine of CBAM but we find that its political face has also become tainted with suspicion. To put this break back together, any re-casting of the scheme would have to incorporate permanent conduits to distant voices, particularly those voices of the pressured margins of the Global South.

DISPARITIES IN CARBON ACCOUNTING AND VERIFICATION STANDARDS

The true spirit of the CBAM, and, in truth, its capacity to do anything, depends on whether its carbon math and the check-lists to ensure its legitimacy are in fact good and fair. The bad news? In the very centre of the entire scheme, there is a hiccup: the EU is essentially desirous of leaning on the default figures and its own yardsticks of Emission Trading System (ETS) and then smacking them against the metre of the amount of carbon concealed behind foreign goods. It reads so well on paper but it rather reeks of an attitude of we are doing things our way, thank you.

Many countries in the Global South face profound challenges in building the institutional and technological infrastructure needed for precise carbon accounting. These challenges include limited access to emissions data, absence of third-party verification mechanisms. And lack of human capacity to operate complex MRV frameworks. Consequently, when exporters are unable to present accurate carbon data, the CBAM's default emissions value apply—often based in the worst-performing 10% of EU producers in a sector, thus penalising countries for a capacity deficit rather than actual environmental harm.[15]

The mechanism's rigid use of EU-specific Life Cycle Assessment (LCA) methodologies further aggravates inequities. These assessments, which factor in emissions across a product's full supply chain, are tailored to EU industrial practices and environmental conditions.[16] When applied globally without contextual adjustments, they risk distorting emissions profiles of goods from tropical, agrarian, or decentralised energy economies. For instance, emissions from cement production or steel manufacturing in sub-Saharan Africa might be inaccurately assessed due to methodological bias or insufficient baseline data.

The lack of a common, multilateral formula of how to measure and compare the carbon footprints is not just a procedural gap, but it sits ill with the creed of the Paris Agreement of the "common but differentiated responsibilities and respective capabilities" (CBDR-RC). The UNFCCC, in its gentle, almost diplomatic way, tells nations to design MRV systems that match

[15] European Commission, *Staff Working Document Impact Assessment Report Accompanying the Proposal for a Regulation Establishing a Carbon Border Adjustment Mechanism* SWD (2021) 643 final (14 July 2021) 24.
[16] Benito Müller and Leonardo Massai, 'Fixing Climate Governance through CBAM? A View from the Global South' (Oxford Institute for Energy Studies 2023).

INDRAPRASTHA LAW REVIEW

their own context. Yet CBAM, stubbornly linear, offers no such breathing room. It does not pause for the transitional hand-holding, the grants, or the know-how transfers that would help low-income states even build these verification machines in the first place.

The WTO's Technical Barriers to Trade (TBT) Agreement whispers another warning: don't create obstacles just because you can, and if standards exist internationally, use them.[17] CBAM, as it stands, stumbles here. Nations on the receiving end may well head for Geneva's dispute settlement rooms, alleging the whole arrangement amounts to quiet discrimination—especially if their products meet local green rules but still fail the EU's idiosyncratic metric tape.

If EU is serious about making CBAM both sharper and fairer, it must plant seeds in the Global South: fund MRV-building workshops, pour resources into capacity creation, give time and transitional space to adjust. Perhaps even carve out a neutral international room, under WTO or UNFCCC care, where carbon standards can be co-written, translated, and mutually blessed. Without such shifts, the CBAM risks becoming a paradox: climate tool that, while preaching planetary stewardship, quietly locks in the very injustice it claims to dismantle, pressing hardest on those who lit the smallest fires in history's carbon ledger.

III. FINANCE AND THE MISSING REDISTRIBUTION LOGIC

One of those particularly conspicuous, yet strangely neglected, blemishes of the architecture of CBAM is its lack of any actual, nailed-down plan of where all that money will go. EU estimates that the system would attract mind blowing amounts of staggering sums-billions of euros annually—all by imposing a cost of carbon on imported products.[18] But, strangely, in the legal framework there is no solid vow to channel those funds to climate aid or development finance of the very countries that are apt to suffer most.

From an ethical angle, this absence is more than a design flaw—it's narrative contradiction. CBAM dresses itself in the robes of climate justice, claiming it will stem carbon leakage and keep competition fair where climate rules are strict. But without a built-in way to give back, it begins to look like a mechanism that talks fairness while quietly reinforcing old patterns—placing a heavier load on developing states and offering no hand in return. From a legal perspective, such an absence may conflict with the principle of CBDR-RC embedded in the Paris Agreement, which mandates financial and technological support to developing nations

[17] *Agreement on Technical Barriers to Trade* (adopted 15 April 1994, entered into force 1 January 1995) 1868 UNTS 120, art 2.2.

[18] European Commission, *Questions and Answers: The Carbon Border Adjustment Mechanism (CBAM)* (14 July 2021) https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_3661.

INDRAPRASTHA LAW REVIEW

Current EU policy documents indicate that CBAM revenues will be channelled into the EU budget, specifically to support domestic green transition efforts under the 'Own Resources' initiative.[19] While this aligns with internal EU climate targets, it represents a missed opportunity to address the broader international justice dimensions of climate finance. The Green Climate Fund (GCF) and the Adaptation Fund under the UNFCCC remain significantly underfunded, with the promised US$100 billion annual target yet to be met.[20] A portion of CBAM-generated revenues could help bridge this financial gap and improve global equity climate governance.

Furthermore, there is limited transparency and accountability in how CBAM revenues will be collected and utilised. Unlike mechanisms such as the Clean Development Mechanism (CDM), CBAM lacks embedded safeguards or earmarking protocols to ensure that funds are allocated in the line with development and environmental objectives.[21] The absence of such mechanisms could lead to perceptions of green protectionism, with revenue generation prioritized over equitable climate action.

Developing nations have continuously demanded CBAM revenues to be recycled either by channels of climatic finance or by reinvesting into capacity-building projects. These involve facilitating the implementation of carbon monitoring system, green technology and fair transition programmes in the carbon-intensive industries. Provided in a fair way, CBAM revenues might become an effective mechanism of the promotion of sustainable development and strengthening the global climate solidarity.

And when the EU is really prepared to don the mantle of climate justice, then it must not only tax and count, but it must also repay, visibly and by edict. One direction would be to cut a well-defined percentage of CBAM revenue and invest it in international climate funds, or even create a new, EU-branded Climate Equity Fund focused directly at those countries that are most vulnerable due to export dependency. It would not only mend the image of CBAM under the WTO scrutiny but also resonate with the long-standing promises by the EU to ensure that trade is bound to sustainable development in the field of international law.

INDRAPRASTHA LAW REVIEW

[19] European Commission, *Proposal for a Council Decision on the System of Own Resources of the European Union* COM (2021) 570 final (22 September 2021) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0570.

[20] UNFCCC, 'Climate Finance in the Negotiations' https://unfccc.int/topics/climate-finance accessed 21 June 2025.

[21] Benito Müller, 'Revenue Recycling and Climate Finance: Options for CBAM Revenue Use' (Oxford Climate Policy 2022).

IV. WTO COMPATIBILITY: LEGAL FRICTIONS AND INTERPRETIVE POSSIBILITIES

Whether CBAM sits comfortably within the WTO's rulebook is a question that sparks more argument than agreement. It brushes up against several trade pacts—chiefly the GATT 1994, the TBT Agreement, and the SCM Agreements—like a guest trying to slip into three parties at once.

Under GATT, the red flag that eaves first is Article I:1, the one that insists all trading partners get the same friendly handshake—the Most-Favoured-Nation rule—without anyone being shoved to the back of the line.[22] Since CBAM applies only to goods imported into the EU and not to similar goods produced domestically, it could also infringe upon the national treatment obligation under Article III:4.[23] Critics argue that CBAM, even though linked to environmental objectives, imposes discriminatory burdens on imports, particularly from developing countries that lack the financial and technical means to measure or reduce embedded emissions.[24]

However, the EU may seek justification under GATT Article XX, which allows exceptions for measures "necessary to protect human, animal or plant life or health" (paragraph b)[25] or those "relating to the conservation of exhaustible natural resources" (paragraph g)[26], provided they are not applied in a manner that constitutes arbitrary or unjustifiable discrimination. While environmental protection is now widely recognized as a legitimate policy goal, the WTO Appellate Body has traditionally subjected such measures to strict scrutiny to ensure consistency and proportionality.[27]

Another legal friction arises under the TBT Agreement, which requires that technical regulations not create unnecessary obstacles to international trade and should be based on relevant international standards. The unilateral and EU-specific design of CBAM, coupled with lack of coordinated global carbon pricing standards, raises the risk of violating TBT provisions.

INDRAPRASTHA LAW REVIEW

[22] *General Agreement on Tariffs and Trade* (adopted 30 October 1947, entered into force 1 January 1948) 55 UNTS 194, art I (1).
[23] *General Agreement on Tariffs and Trade* (adopted 30 October 1947, entered into force 1 January 1948) 55 UNTS 194, art III (4).
[24] Aaron Cosbey and others, 'Developing Guidance for Implementing Border Carbon Adjustments: Lessons, Cautions, and Research Needs from the Literature' (IISD Report, 2021) https://www.iisd.org/publications/border-carbon-adjustments.
[25] *General Agreement on Tariffs and Trade* (adopted 30 October 1947, entered into force 1 January 1948) 55 UNTS 194, art XX(b).
[26] *General Agreement on Tariffs and Trade* (adopted 30 October 1947, entered into force 1 January 1948) 55 UNTS 194, art XX(g).
[27] Appellate Body Report, *United States — Import Prohibition of Certain Shrimp and Shrimp Products* (12 October 1998) WT/DS58/AB/R.

Developing countries could argue that the EU's measures do not adequately consider their developmental context or allow for flexible compliance pathways.

Furthermore, CBAM may be construed as an indirect subsidy to EU industries under the SCM Agreement. By placing a cost on imported carbon-intensive goods without imposing equivalent costs on exported EU products, the mechanism could confer a financial advantage to domestic firms, potentially triggering disputes under WTO disciplines on export competitiveness. This issue becomes more acute when CBAM revenues are channelled into domestic green transmission programs without compensatory mechanisms for developing countries. Despite these risks, some scholars argue that CBAM could be defended under a progressive interpretation of WTO jurisprudence. The Appellate Body in US—Shrimp and EC—Asbestos has affirmed that WTO law permits environmental measures that are non-discriminatory and scientifically justified.[28] Furthermore, WTO reform discussions increasingly acknowledge the importance of climate-related trade measures.[29] In 2023, 74 WTO members, including the EU, issued a Ministerial Statement on Trade and Environment Sustainability, supporting policy coherence between trade and climate action.[30] Nevertheless, the ultimate test for CBAM will lie in its practical implementation. To minimise legal friction, the EU must ensure procedural fairness, transparency in emissions calculation, and avenues for developing countries to contest or negotiate their obligations. Additionally, proactive engagement through the WTO Committee on Trade and Environment (CTE)[31] and multilateral negotiations on climate-compatible trade norms could help legitimize CBAM within the existing trade regime. To conclude, CBAM operates in a legally grey area within WTO law. While it may be defensible under environmental exceptions, its legitimacy will depend on how equitably and inclusively it is applied. A cooperative, rule-based evolution of WTO disciplines may be essential to reconciling trade and climate imperatives in a carbon-constrained world.

GATT Article III and the Principle of National Treatment

The WTO framework prohibits discrimination between imported and domestic like products under Article III of GATT. CBAM raises the issue whether its differential treatment of imports

[28] Appellate Body Report, *European Communities — Measures Affecting Asbestos and Products Containing Asbestos* (12 March 2001) WT/DS135/AB/R.

[29] Harro van Asselt, 'Governing Trade and Climate through the WTO: Aligning Border Carbon Adjustments with International Trade Law' (2021) 25(1) *Journal of International Economic Law* 37.

[30] WTO, 'Trade and Environmental Sustainability Structured Discussions: Ministerial Statement' (WTO, 2023) https://www.wto.org/english/news_e/news23_e/tessd_01dec23_e.htm.

[31] World Trade Organization, *Committee on Trade and Environment* https://www.wto.org/english/tratop_e/envir_e/envir_e.htm.

INDRAPRASTHA LAW REVIEW

based on embedded emissions violates this non-discrimination principle.[32] While the mechanism purports to level the playing field, it risks violating WTO rules if it imposes a de facto tax on imports that does not apply equally to domestic producers. In *EC — Asbestos,* the Appellate Body recognized that origin-neutral policies could still violate Article III if their application disadvantages imported products.[33] The EC must thus justify CBAM's differential treatment in a narrowly tailored manner.

Environmental Exceptions under GATT Article XX: Case Law Guidance

Should CBAM be found inconsistent with Article III, it may still be defended under GATT Article XX, which allows exceptions for measures necessary to protect human, animal, or plant life or health [XX(B)] and for the conservation of exhaustible natural resources [XX(G)]. Key WTO cases provide interpretive context:

i. In *US — Gasoline,* the Appellate Body allowed environmental protection as a valid justification under XX(g) but emphasized even-handedness between domestic and foreign producers.[34]

ii. In *US — Shrimp,* the Appellate Body accepted marine conservation as a legitimate aim but struck down the U.S. measure due to its coercive and unilateral implementation lacking adequate negotiation with affected countries. [35]

iii. *Brazil — Retreaded Tyres* affirmed that protection of health and the environment can outweigh trade restrictions if measures are not applied arbitrarily. [36]

These precedents illustrate that for CBAM to be justified under Article XX, it must be designed transparently, proportionally, and with due process for affected exporters.

Relevance of the Chapeau of Article XX

The chapeau of Article XX functions as a gateway, ensuring that even valid environmental exceptions do not become disguised trade restrictions.[37] In *US — Shrimp,* the U.S. failed the chapeau test by not offering affected countries sufficient cooperative avenues. CBAM's current

[32] *General Agreement on Tariffs and Trade* (adopted 30 October 1947, entered into force 1 January 1948) 55 UNTS 194, art III.
[33] Appellate Body Report, *European Communities — Measures Affecting Asbestos and Products Containing Asbestos* (2001) WT/DS135/AB/R, para 100.
[34] Appellate Body Report, *United States — Standards for Reformulated and Conventional Gasoline* (1996) WT/DS2/AB/R, 29.
[35] Appellate Body Report, *United States — Import Prohibition of Certain Shrimp and Shrimp Products* (1998) WT/DS58/AB/R, paras 161–186.
[36] Appellate Body Report, *Brazil — Measures Affecting Imports of Retreaded Tyres* (2007) WT/DS332/AB/R, para 151.
[37] *General Agreement on Tariffs and Trade* (adopted 30 October 1947, entered into force 1 January 1948) 55 UNTS 194, art XX chapeau.

INDRAPRASTHA LAW REVIEW

design, with its emphasis on EU-centric standards, may similarly fail unless adequate procedural fairness and negotiation with developing nations is embedded.

Compatibility with the TBT and SCM Agreements

Beyond GATT, the CBAM could potentially fall under the WTO's TBT Agreement or the Agreement on SCM. If viewed as a regulatory measure affecting product characteristics or related processes, it must comply with TBT's disciplines on non-discrimination, legitimate objectives, and avoidance of unnecessary trade restriction. *In Canada — Feed-in Tariff,* the Appellate Body stressed the importance of not favouring domestic over foreign products through regulatory design.[38] Although, CBAM is framed as a broader measure, its regulatory depth may attract scrutiny under these instruments, particularly if its reporting and verification frameworks lack equivalence mechanisms for non-EU carbon pricing regimes.

Jurisprudential Trends: CBAM and Future Legal Contention

CBAM's implementation timeline coincides with rising geopolitical tensions and increasing climate-related litigation. WTO members from the Global South have raised procedural and distributive concerns in WTO Committees on Trade and Environment. Recent consultations in the WTO indicate a heightened sensitivity to unilateral climate measures perceived as green protectionism.[39] Future disputes may arise invoking prior case law, particularly if developing nations challenge CBAM's conformity with the principles of special and differential treatment enshrined in WTO jurisprudence. The panel report in *India — Solar Cells* reiterated the balancing act between environmental obligations and trade commitments, potentially setting a precedent for assessing CBAM-like measures.[40]

Moreover, the *EU — Energy Package* dispute, though not directly environmental, hinted at the WTO's increasing receptiveness to context-sensitive policy space claims, thereby opening interpretive room for climate policies provided procedural safeguards are respected.[41] CBAM's legitimacy may ultimately rest not on its climate ambition, but on its ability to integrate fairness, flexibility, and consultation into its design.

INDRAPRASTHA LAW REVIEW

[38] Appellate Body Report, *Canada — Certain Measures Affecting the Renewable Energy Generation Sector* (2013) WT/DS412/AB/R, paras 5.57–5.93.
[39] WTO Committee on Trade and Environment, *Minutes of the Meeting Held on 27–28 June 2023*, WTO Doc. WT/CTE/M/72 (Oct. 12, 2023).
[40] Panel Report, *India — Certain Measures Relating to Solar Cells and Solar Modules* (2016) WT/DS456/R.
[41] Panel Report, *European Union and its Member States — Certain Measures Relating to the Energy Sector* (2018) WT/DS476/R.

V. GEOPOLITICAL REPERCUSSIONS AND TRADE RETALIATION RISKS

The introduction of the CBAM by the European Union has sparked considerable geopolitical concern, particularly among Global South economies, who perceive it as a new form of green protectionism. While CBAM aims to prevent carbon leakage and uphold climate integrity, its unilateral design and limited engagement with developing nations have increased the risk of geopolitical friction and retaliatory trade measures.

Several major developing countries, including India, Brazil, South Africa, and China, have publicly criticized CBAM as discriminatory and inconsistent with the principle of CBDR-RC under the Paris Agreement.[42] These states argue that CBAM shifts the burden of climate mitigation onto those with historically low emissions and limited capacity to transition. They also emphasize that the mechanism undermines the trust required for global climate cooperation.[43]

Retaliatory actions are already being discussed in policy circles. India has proposed invoking reciprocal tariffs under WTO rules,[44] while Brazil has raised the possibility of initiating dispute settlement proceedings if CBAM is found to violate WTO obligations.[45]

The BASIC countries (Brazil, South Africa, India, and China) issued a joint statement in 2023 asserting that trade measures must not undermine multilateralism or climate justice.[46] Moreover, CBAM could destabilize ongoing negotiations in multilateral trade and climate platforms. For instance, resistance to CBAM in the WTO may stall broader reform agendas, including environmental goods agreements and sustainable supply chain initiatives. The EU's leadership in climate diplomacy may also be challenged if developing nations increasingly view it as imposing unilateral burdens without equitable financial and technological support.[47]

The diplomatic backlash to CBAM also risks slowing down international climate finance pledges. Countries that feel unfairly targeted may delay or withhold cooperation in climate funding forums like the Green Climate Fund (GCF) or the Loss and Damage Fund. This dynamic could undercut global efforts to scale up mitigation and adaptation strategies, particularly in vulnerable nations. Additionally, the mechanism may stimulate a proliferation of competing carbon border adjustment schemes by other countries or regional blocs. The

[42] UNFCCC, 'Joint Statement by BASIC Countries on CBAM' (UNFCCC, 2023) https://unfccc.int/news/basic-countries-joint-statement-on-cbam accessed 22 June 2025.
[43] Ministry of Environment, Forest and Climate Change (India), 'India's Statement on the EU CBAM' (2023).
[44] Financial Express, 'India Plans Tariffs in Response to EU Carbon Tax' (*Financial Express*, 2024) https://www.financialexpress.com/economy/india-plans-tariffs-eu-carbon-tax accessed 22 June 2025.
[45] WTO, 'Dispute Settlement: Brazil Threatens Legal Action over CBAM' (2024).
[46] BASIC Group, 'Ministerial Joint Statement on Climate Change and Trade' (2023).
[47] Harro van Asselt, 'Trade, Climate Diplomacy and the Carbon Border Adjustment Mechanism' (2023) 24(3) Review of European, Comparative & International Environmental Law 312.

INDRAPRASTHA LAW REVIEW

United Kingdom and Canada have already expressed interest in developing their own CBAM models.[48] Without coordination, this could lead to a fragmented global trade regime with overlapping or conflicting climate-related trade measures—deepening trade tensions and legal uncertainty. To reduce these risks, the EU must adopt a diplomatic strategy that emphasizes cooperation, dialogue, and mutual benefit. Establishing formal channels for Global South engagement in CBAM development, creating flexibilities or exemptions for least-developed countries, and pledging a fixed share of CBAM revenues to international climate finance could help alleviate geopolitical tensions.[49] In parallel, efforts must be made at the WTO and UNFCCC to co-develop carbon pricing frameworks that are transparent, inclusive, and legally defensible.

In essence, while CBAM is driven by a legitimate climate rationale, its success will hinge on its geopolitical sensitivity. If perceived as coercive or unjust, it risks sparking retaliatory cycles and weakening the global climate regime. A cooperative approach rooted in climate justice and trade fairness is indispensable to secure its legitimacy and sustainability.

VI. COMPARATIVE ANALYSIS

The European Union's Carbon Border Adjustment Mechanism (EU CBAM) and the United Kingdom's analogous post-Brexit carbon border tax (UK CBAM) represent divergent yet convergent approaches to internalising the external costs of carbon emissions in international trade, each calibrated to distinct domestic emissions trading architectures and geopolitical imperatives. Operational since January 2026, the EU CBAM mandates importers to purchase and surrender certificates equivalent to the embedded emissions in covered goods; initially iron and steel, aluminium, cement, fertilisers, electricity, and hydrogen; priced against the EU ETS allowance auction. This market-based instrument ensures fiscal neutrality by aligning border adjustments with domestic carbon pricing, ostensibly mitigating carbon leakage while preserving competitiveness for EU producers. In contrast, the UK CBAM, slated for full enforcement in 2027, adopts a direct tax-based model, levying charges on imports at a rate mirroring the UK's nascent ETS carbon price, but deliberately excluding electricity due to the nation's import dependency.

Scholarly comparisons illuminate structural asymmetries with profound implications for procedural fairness and developmental equity, particularly for Global South exporters. The

[48] Reuters, 'UK and Canada Explore Carbon Border Taxation' (Reuters, 2023) https://www.reuters.com/business/cop/uk-canada-cbam-2023 accessed 22 June 2025.

[49] European Commission, 'CBAM Implementation Guidelines and Developing Country Cooperation Plans' (2024).

INDRAPRASTHA LAW REVIEW

EU's transitional phase (2023-2025) imposed quarterly reporting obligations, escalating administrative burdens on small-to-medium enterprises from carbon-intensive sectors in South Asia, where domestic pricing mechanisms remain underdeveloped. The UK CBAM, by eschewing this phase and instituting annual declarations transitioning to quarterly payments, streamlines compliance; its £50,000 rolling exemption threshold which is substantially higher than the EU's €150 *de minimis*, offers disproportionate relief to low-volume exporters from India, Bangladesh, and Pakistan, whose steel and fertiliser shipments often straddle this threshold. Sectoral scope further diverges; the EU's inclusion of electricity reflects its energy self-sufficiency, whereas the UK's exclusion safeguards vulnerabilities in cross-Channel interconnections, underscoring how national energy profiles dictate policy design.

From a WTO vantage, both mechanisms invoke Article XX GATT exceptions for environmental protection, yet the EU CBAM's certificate surrender, deemed a non-tariff barrier by challengers like Russia, invites greater scrutiny under the Agreement on Import Licensing Procedures than the UK's transparent tax, which approximates a customs duty. Revenue trajectories amplify equity deficits; EU CBAM proceeds accrue to the general budget with opaque channelling to climate finance, perpetuating critiques of "green protectionism"; the UK variant earmarks funds for domestic decarbonisation, sidestepping multilateral redistribution but alleviating fears of unilateral revenue capture.

Empirical modelling anticipates heterogeneous impacts; GGRI projections indicate a 15–22% erosion in South Asian steel competitiveness under EU CBAM, moderated under UK CBAM by fiscal leniency. This comparative lens exposes CBAM's incarnation as a vector of asymmetrical globalisation, where procedural innovations (e.g., UK's simplified reporting) could inform reforms, yet both entrench North-South divides absent compensatory mechanisms like historical emissions rebates. Ultimately, the EU-UK divergence exemplifies the tension between climate unilateralism and trade multilateralism, necessitating a harmonised framework to vindicate legitimacy in global governance.

VII. CONCLUSION AND RECOMMENDATIONS

The CBAM of the European Union is an important breakthrough in the nexus of trade and environmental regulation. Conceived as a climate policy instrument to lessen the emission of carbon and shield the domestic industries against unfair competitions, its wider implications are seen in the global trade framework, the legal framework of the World Trade Organisation (WTO), and the emerging discourse on climate justice and sustainable development. In this paper, the design and implementation of CBAM is critically assessed with the understanding

INDRAPRASTHA LAW REVIEW

that, although it has an environmental rationale, it still raises serious issues of equity, procedural justice, transparency, and compatibility with WTO. The unilateral implementation of CBAM without involving developing countries, especially those in Global South will likely enhance the existing global inequalities and cripple institutional capacities are overburdened with the complicated carbon accounting process and tough verification measures, which further marginalises them in the global trading system.

Moreover, it is possible to note that the existing framework has significant gaps when it comes to redistributive justice. The lack of a binding system to distribute the revenues of CBAM to climate adaptation and mitigation projects in vulnerable nations raises the question of legitimacy of the measure as a means of climate equity. Unless the EU guarantees the transparency of the process, proportionality and differentiation in treatment based on developmental capacity, legal tensions under WTO law, particularly within the realms of the GATT and the Agreement on TBT will not be resolved.

To enhance CBAM's credibility and effectiveness as a vehicle for equitable climate governance, this paper proposes the following recommendations:

Multilateral Participation and Inclusive Governance:

The EU should institutionalize pathways for meaningful engagement with the Global South in the formulation, implementation, and monitoring of CBAM. This could involve establishing structured dialogues under the WTO Committee on Trade and Environment and ensuring collaborative input in developing Monitoring, Reporting, and Verification (MRV) standards. Regular forums for feedback and representation of least developed countries can ensure their concerns are embedded in CBAM's legal design, thereby promoting legitimacy and buy-in.

Reform of Revenue Allocation Mechanisms:

A legally enforceable provision should earmark a portion of CBAM revenues for international climate finance vehicles such as the Green Climate Fund or a newly established Climate Equity Fund, to facilitate equitable transitions in developing economies. This allocation can be institutionalized through a transparent revenue-sharing framework that directly links CBAM receipts to measurable climate adaptation and mitigation efforts in affected countries.

Capacity Development and Technical Support:

Investments should be directed toward strengthening institutional capabilities in developing countries, particularly in building Monitoring, Reporting, and Verification (MRV) systems and providing technical training to enable accurate carbon accounting. This includes financing MRV systems and providing technical training. Establishing regional carbon accounting

INDRAPRASTHA LAW REVIEW

support hubs and funding joint EU-developing country research initiatives can further empower local institutions.

Context-Sensitive Carbon Accounting:

There is an urgent need to adopt carbon measurement methodologies that acknowledge regional production characteristics and constraint, rather than imposing standardized benchmarks rooted in EU-centric assumptions. Collaborative development of sector-specific benchmarks, along with transitional flexibilities, would help integrate developing nations without imposing undue burdens.

Legal Compliance with WTO Norms:

CBAM should be carefully aligned with WTO obligations, notably Article I and III of GATT and Article 2.2 of the TBT Agreement.[50] Reliance on Article XX exceptions should be a measure of last resort, justified by scientific evidence and grounded in fairness. Building pre-emptive legal justifications and embedding proportionality tests into the design of CBAM will reduce the likelihood of successful WTO disputes.

Diplomatic Engagement and Geopolitical Sensitivity:

The EU must actively counter perceptions of protectionism by affirming CBAM's primary objective as a climate mitigation tool, ensuring it adheres to principles of international law and equity. Engaging in bilateral and regional climate trade diplomacy, particularly with major developing economies, can ease tensions and promote shared understanding.

Furthermore, the absence of harmonized global methodology for calculating embedded emissions in traded goods introduces systemic inequities. The EU's use of domestic benchmarks often places exporters from the Global South at a disadvantage, particularly where institutional infrastructure to provide certified emissions data is lacking. Default carbon values are frequently applied, which can overstate actual emissions, distort trade patterns, and impose undue economic hardship on low-emitting producers. A particularly critical shortcoming lies in the lack of redistributive intent within the current CBAM framework. Despite longstanding commitments under the United Nations Framework Convention on Climate Change (UNFCCC)—including the pledge to mobilize $100 billion annually for climate finance—there is no formal mechanism through which CBAM proceeds are allocated to support developing countries. Without such redistribution, CBAM risks functioning as a regressive mechanism that reinforce North-South inequalities under the pretence of environmental integrity.

[50] Agreement on Technical Barriers to Trade (adopted 15 April 1994, entered into force 1 January 1995) 1868 UNTS 120, art 2.2

INDRAPRASTHA LAW REVIEW

In conclusion, while CBAM holds the potential to contribute meaningfully to a climate conscious global trading system, its future legitimacy and effectiveness will depend on its ability to balance environmental goals with equity, legal soundness, and inclusiveness. If implemented with these principles at its core, CBAM could serve not as barrier, but as a bridge– linking the divergent priorities of developed and developing nations in the collective pursuit of climate resilience. Policymakers must prioritize dialogue through forums like the WTO's Trade and Environment Committee, transforming scepticism into collaboration.

INDRAPRASTHA LAW REVIEW